C3450

OKI
PRINTING SOLUTIONS

User's Guide

C3450n

C3000 Series

PREFACE

Every effort has been made to ensure that the information in this document is complete, accurate, and up-to-date. The manufacturer assumes no responsibility for the results of errors beyond its control. The manufacturer also cannot guarantee that changes in software and equipment made by other manufacturers and referred to in this guide will not affect the applicability of the information in it. Mention of software products manufactured by other companies does not necessarily constitute endorsement by the manufacturer.

While all reasonable efforts have been made to make this document as accurate and helpful as possible, we make no warranty of any kind, expressed or implied, as to the accuracy or completeness of the information contained herein.

The most up-to-date drivers and manuals are available from the Oki Europe website:

http://www.okiprintingsolutions.com

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CE

This product complies with the requirements of the Council Directives 89/336/EEC, 73/23/EEC (LVD) and 1999/5/EC (R&TTE), as amended where applicable, on the approximation of the laws of the member states relating to Electromagnetic Compatibility, Low Voltage and Radio & Telecommunications Terminal Equipment.

Please note that Microsoft Windows XP was used to produce all screenshots in this manual. These screenshots may vary if you are using any other operating system, but the principle is the same.

EMERGENCY FIRST AID

Take care with toner powder:

If swallowed, give small amounts of cold water and seek medical attention. DO NOT attempt to induce vomiting.

If inhaled, move the person to an open area for fresh air. Seek medical attention.

If it gets into the eyes, flush with large amounts of water for at least 15 minutes keeping eyelids open. Seek medical attention.

Spillages should be treated with cold water and soap to help reduce risk of staining skin or clothing.

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NOTES, CAUTIONS AND WARNINGS

NOTE
A note provides additional information to supplement the main text which may help you to use and understand the product.

CAUTION!

A caution provides additional information which, if ignored, may result in equipment malfunction or damage.

WARNING!

A warning provides additional information which, if ignored, may result in a risk of personal injury.

INTRODUCTION

Congratulations on buying this Oki colour printer. Your new printer is designed with advanced features to give you clear, vibrant colour prints and crisp black and white pages at high speed on a range of office print media.

Your printer includes these features:

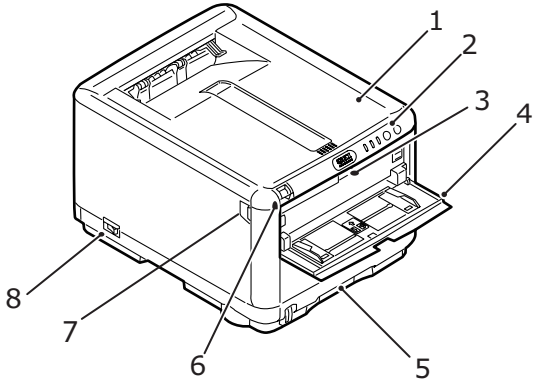
- ProQ2400 Multi-level technology produces subtle tones and smooth gradations of colour to lend photographic quality to your documents.
- This model prints up to 16ppm (pages per minute) in full colour for fast printing of high impact colour presentations and other documents, and up to 20ppm (pages per minute) in black and white for fast and efficient printing of all general purpose documents not requiring colour.
- 600 x 600dpi (dots per inch), 1200 x 600dpi and 600 x 600dpi x 2bit print resolution for high quality image production showing the finest detail (ProQ2400).
- Single Pass Colour Digital LED technology for high speed processing of your printed pages.
- 10Base-T and 100Base-TX network connection lets you share this valuable resource among users on your office network.
- High speed USB 2.0 interface.
- "Ask Oki" (Windows only) – a user-friendly function that gives a direct link from your printer driver screen (but not always illustrated in this guide) to a dedicated web site specific to the exact model you are using. This is where you'll find all the advice, assistance and support you could need to help you get the best possible results from your Oki printer.

Additionally, the following optional feature is available :

- Additional memory, to allow printing of more complex pages.

PRINTER OVERVIEW

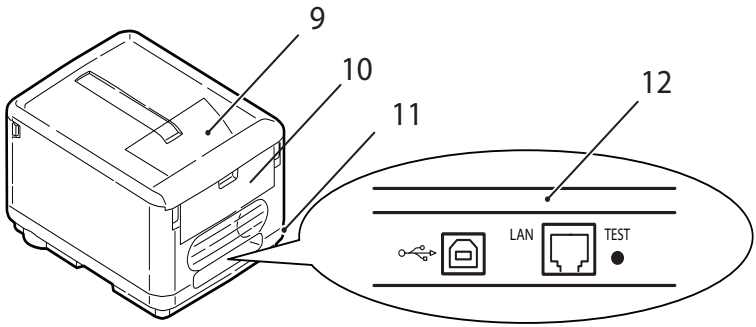
FRONT VIEW



1. Printer cover. 2. Operation Panel. Status LEDs and operator buttons. 3. Multi Purpose Feeder Tray Release. (when closed, press to open). 4. Multi Purpose Tray (shown open). Used for manual duplex, feeding heavier paper stocks, envelopes and other special media. Also for manual feeding of single sheets when required.	5. Cassette Tray. Standard blank paper tray. Holds up to 250 sheets of 80g/m² paper. 6. Printer Cover Open Release (push to open). 7. Front Cover Open Release (press to open) 8. ON/OFF switch.

REAR VIEW

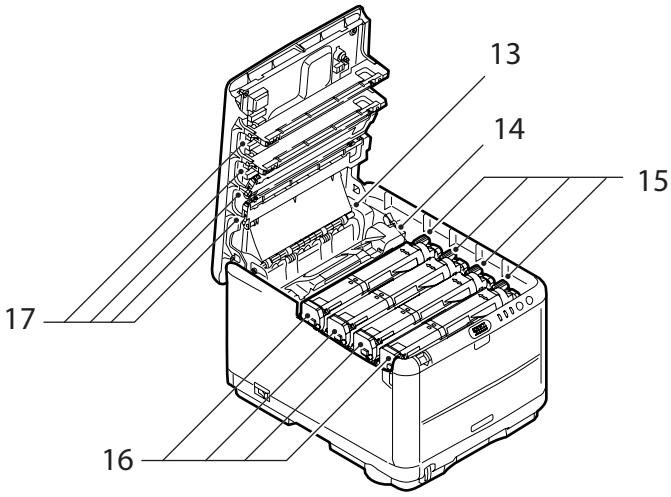
This view shows the connection panel and the rear output stacker.



9. Output stacker, face down. Standard printed copy delivery point. Holds up to 150 sheets at 80g/m². 10. Rear Stacker, face up. Can hold up to 10 sheets of 80g/m² standard paper and can handle paper stocks of up to 203g/m².	11. AC Power Socket. 12. USB interface and LAN Port USB cable must be of length 2m maximum for reliable Status Monitor operation.

When the rear paper stacker is folded down, paper exits through the rear of the printer and is stacked face up. The rear stacker is mainly used for heavy print media. When used in conjunction with the Multi Purpose Tray, the paper path through the printer is essentially straight. This avoids bending the paper around curves in the paper path inside the printer and enables feeding of up to 203g/m² media.

INSIDE YOUR PRINTER

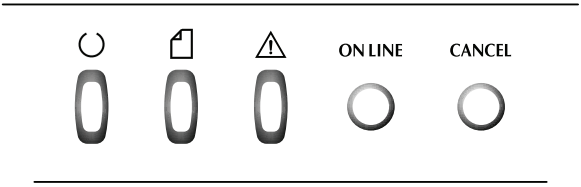


13. Fuser unit. The Fuser unit contains a heated roller that fixes toner to the print media (paper or card). 14. Fuser lever. The lever has a locked position for when the toner cartridge is in place and an unlocked position for removal and changing. 15. Toner cartridges and toner cartridge levers. The 4 toner cartridges hold dry powdered ink. The lever locks the toner cartridge into place on the image drum or releases it for changing.	16. Image drum units. The toner from the toner cartridges adheres to the outer plate of the image drum. The image drum then transfers the toner to the print media as it passes through the printer. 17. LED Heads. 4 LED (Light Emitting Diode) Heads direct light onto the 4 image drums.

Press the Cover Open Release (7) to open the printer cover and look inside the printer.

THE OPERATION PANEL

The Operation Panel allows operator intervention and indicates both when the printer is operating normally and when it requires attention. Detailed printer status is provided by the Status Monitor in Windows or Printer Driver in Mac. (See "Using the Status Monitor" on page 67.)



The Operation Panel incorporates 3 LEDs and 2 push-button switches as follows (from left to right):

- Power (Ready) LED (green)
- Paper LED (amber)
- Alarm LED (amber)
- ON LINE switch
- CANCEL switch

The switches enable printer operation while the LEDs display the status of the printer operation.

SWITCHES

Operation

There are two switches on the operation panel labelled ON LINE and CANCEL. Each has four modes of operation as follows:

MODE OF OPERATION	DESCRIPTION
Momentary press (Press 1)	Press the switch and release it within 2 seconds of pressing it. On releasing the switch, operation starts.
2-second press (Press 2)	Press the switch and hold for between 2 and 5 seconds after pressing it. On releasing the switch, operation starts (except in the case of a job cancellation).
5-second press (Press 5)	Press the switch and hold it for 5 seconds or more. The operation starts 5 seconds after pressing the switch, even if you hold it pressed for more than 5 seconds.
Press at Power On	At Power On, press the switch

Function

The results of operating the switches in different contexts are summarised below:

STATUS BEFORE PRESSING	ONLINE SWITCH			CANCEL SWITCH		
	PRESS 1	PRESS 2	PRESS 5	PRESS 1	PRESS 2	PRESS 5
ON LINE (idling mode)	Shifts to OFF LINE	Prints Menu Map (*1)	Prints Demo Print	–	–	–
OFF LINE (idling mode)	Shifts to ON LINE	Prints Menu Map (*2)	Prints Demo Print (*2)	–	–	–
ON LINE (data being received, processing or printing)	Shifts to OFF LINE	–	–	–	Cancels job (*3)	–
Requesting manual feed	Loads paper from Cassette Tray	–	–	–	Cancels job (*3)	–
Paper is set in Multi Purpose Tray (no print job)	Shifts to OFF LINE	Prints Menu Map (*1)	Prints Demo Print	Forcefully ejects paper		
No paper in Cassette Tray or Cassette Tray open	-	-	-	–	Cancels job (*3)	–
Memory overflow or invalid data	Recovers from the error and shifts to ON LINE	Prints Menu Map (*1)	Prints Demo Print	–	–	–
Paper jam	–	–	–	–	–	–

*1: The Menu Map (or Status Page) provides details of printer settings and status information.

*2: Shifts to ON LINE after printing has started.

*3: Cancels job 2 seconds after start of switch operation (even if the switch is held down longer).

LED DISPLAYS

General

Printer status (as indicated by the LEDs) can be broadly categorised as follows:

1. Normal status (Green): the printer is operating normally e.g. it is ON LINE or processing.
2. Warning status (Amber): you can continue to use the printer without intervention but an error may result.
3. Error status (Amber, blinking): you cannot continue to use the printer. Intervention is required to recover from the error. Fatal errors are irrecoverable and require a service call.

When several different status situations occur concurrently, only the status with the highest priority is displayed on the LEDs. Warning status combined with the highest-priority normal status is displayed on the LEDs.

Function

A summary of the functions of each LED is given below:

LED	COLOUR	FUNCTION
Power (Ready)	Green (static)	Indicates POWER ON, ON LINE, OFF LINE, power saving, data receiving, printing, job cancelling, warming up, density adjustment/temperature adjustment in progress
Paper	Green (static) and Amber (blinking)	Indicates paper out warning/alarm, manual feed request
Consumable	Green (static) and Amber (blinking)	Indicates consumables life warning/alarm, consumables installation error
Alarm	Green (static) and Amber (blinking)	Indicates paper jam, cover open error

Illumination and meaning

To be able to indicate a large number of status situations both individually and in combination, the LEDs are illuminated as follows:

LED	ILLUMINATION	STATUS
Power (Ready) Green	OFF	Power OFF
	ON	ON LINE (idle)
	Blinking 1 (2S cycle)	OFF LINE (this blinking pattern always takes place while an error is occurring)
	Blinking 2 (500mS cycle)	Data being received, printing, warming up, density adjustment/ temperature adjustment in progress
	Blinking 3 (120mS cycle)	Job cancelling in progress
	Blinking 4 (4.5S ON and 500mS OFF)	Power saving mode
Paper, Consumable, Alarm (Amber)	OFF	ON LINE
	ON	A warning is indicated (printing possible)
	Blinking 1 (2S cycle)	An error has occurred but printing can continue if you press the ON LINE or CANCEL switch.
	Blinking 2 (500mS cycle)	An error has occurred. You need to replace consumables or remove jammed paper, for example. The printer then recovers from the error and printing becomes possible again.
	Blinking 3 (120mS cycle)	A serious error has occurred. rebooting or a service call is required.

The Status Monitor in Windows provides a readable description of the printer status corresponding to the indications of the LEDs. In Mac, the printer driver provides status information once you have sent a document to print. In Windows, if you have the Status Monitor Preferences set to **Pop up on alerts**, this readable message will be presented on screen whenever an abnormal condition occurs. See "Using the printer software" on page 66 for more information.

Service call error

When a service call error occurs, all LEDs blink rapidly and simultaneously at 120ms intervals.

PAPER RECOMMENDATIONS

Your printer will handle a variety of print media, including a range of paper weights and sizes, including envelopes. This section provides general advice on choice of media, and explains how to use each type.

The best performance will be obtained when using standard 75~90g/m² paper designed for use in copiers and laser printers. Suitable types are:

- Arjo Wiggins Conqueror Colour Solutions 90g/m²;
- Colour Copy by Neusiedler.

Use of heavily embossed or very rough textured paper is not recommended.

Pre-printed stationery can be used, but the ink must not offset when exposed to the high fuser temperatures used in the printing process.

Envelopes should be free from twist, curl or other deformations. They should also be of the rectangular flap type, with glue that remains intact when subjected to hot roll pressure fusing used in this type of printer. Window envelopes are not suitable.

Labels should also be of the type recommended for use in copiers and laser printers, in which the base carrier page is entirely covered by labels. Other types of label stock may damage the printer due to the labels peeling off during the printing process. Suitable types are:

- Avery White Laser Label types 7162, 7664, 7666 (A4), or 5161 (Letter);

CASSETTE TRAY

TRAY	WEIGHT (G/M²)	SIZE	DIMENSIONS
		A6	105 x 148mm
		A5	148 x 210mm
	Light: 64-74g/m²	B5	182 x 257mm
Cassette	Medium: 75-90g/m²	Executive	184.2 x 266.7mm
Tray	Heavy: 91-120g/m²	A4	210 x 297mm
		Letter	215.9 x 279.4mm
		Legal 13in.	216 x 330mm
		Legal 13.5in.	216 x 343mm
		Legal 14in.	216 x 356mm

The Cassette Tray can handle paper in weights of 64g/m² to 120g/m². The Cassette Tray is ideal for printing A4 documents of more than 1 page in length.

MULTI PURPOSE TRAY

The Multi Purpose Tray can handle the same sizes as the Cassette Tray but in weights 75 - 203g/m². For very heavy paper stock, always use the face up (rear) paper stacker. This ensures that the paper path through the printer is almost straight.

The Multi Purpose Tray can feed paper widths as small as 100mm and lengths up to 1200mm (banner printing). For paper lengths exceeding 356mm (Legal 14in.) use paper stock between 90g/m² and 128g/m² and the face up (rear) paper stacker.

When using the Multi Purpose Tray, feed each sheet of paper or envelope one-by-one, rather than stacking them. This helps to avoid paper jams.

Watermarked or Headed paper should be loaded print side up and top edge into the printer.

TRAY	WEIGHT (G/M²)	SIZE	DIMENSIONS
		A6	105 x 148mm
		A5	148 x 210mm
		B5	182 x 257mm
		Executive	184.2 x 266.7mm
		A4	210 x 297mm
		Letter	215.9 x 279.4mm
	Light: 64-74g/m²	Legal 13in.	216 x 330mm
Multi	Medium: 75-90g/m²	Legal 13.5in.	216 x 343mm
Purpose	Heavy: 91-120g/m²	Legal 14in.	216 x 356mm
Tray	Ultra heavy: 121-203g/m²	Custom sizes	216 x 356mm
		Letterhead	216 x 279
		COM-9 Envelope	98.4 x 225.4mm
		COM-10 Envelope	104.7 x 241.3mm
		Monarch Envelope	98.4 x 190.5mm
		C5	162 x 229mm
		Banner	210 x 900
		Banner	215 x 900
		Banner	215 x 1200

FACE DOWN STACKER

The Face Down Stacker on the top of the printer can hold up to 150 sheets of 80g/m² standard paper, and can handle paper stocks up to 120g/m². Pages printed in reading order (page 1 first) will be sorted in reading order (last page on top, facing down).

FACE UP STACKER

The Face Up Stacker at the rear of the printer should be opened and the paper support extended when required for use. In this condition paper will exit via this path, regardless of driver settings.

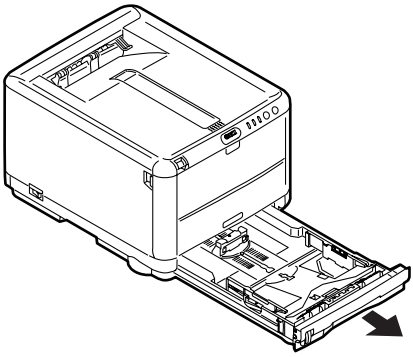
The Face Up Stacker can hold up to 10 sheets of 80g/m² standard paper and can handle stocks up to 203g/m².

Always use the Face Up Stacker and the Multi Purpose Tray for paper stocks heavier than 176g/m².

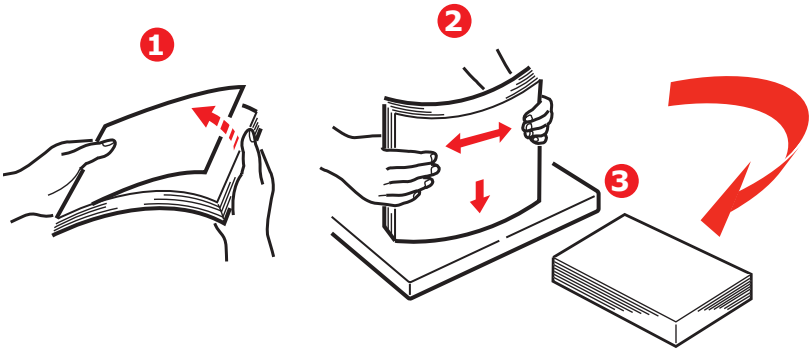
Loading Paper

Cassette Tray

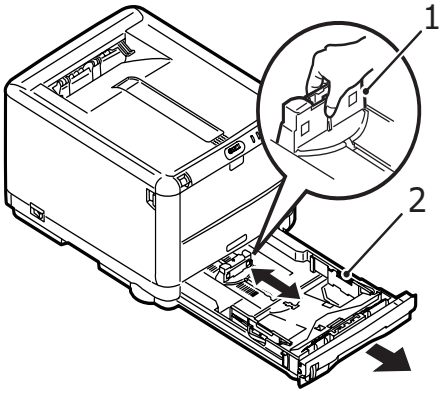
1. Remove the Cassette Tray from the printer.



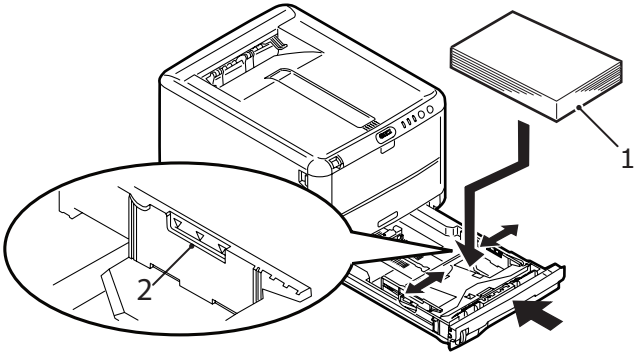
2. Fan the paper to be loaded at the edges (1) and in the middle (2) to ensure that all sheets are properly separated, then tap the edges of the stack on a flat surface to make it flush again.(3).



3. Adjust the Rear Stopper (1) and Paper Guides (2) to the size of paper being used. Use the markings on the printer as a guide.



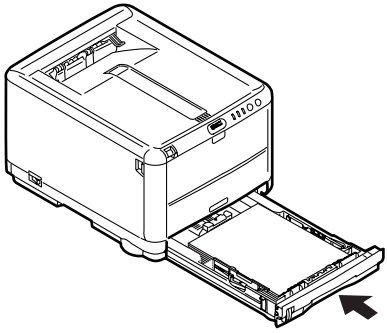
4. Load the paper (1). Use the level indicators (2) as a guide. For letter headed paper, load face down with top edge towards the front of the printer.



To prevent paper jams:

- > Do not leave space between the paper and the guides and rear stopper.
- > Do not overfill the Cassette Tray. Capacity depends on the type of paper stock.
- > Do not load damaged paper.
- > Do not load paper of different sizes or types at the same time.
- > Do not pull the Cassette Tray out during printing.

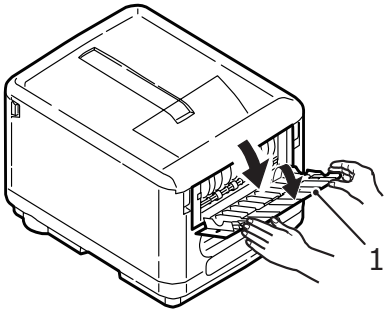
5. Close the Cassette Tray gently.



6. For face down printing, make sure the Face Up (rear) Stacker is closed (the paper exits from the top of the printer). Stacking capacity is approximately 150 sheets, depending on paper weight.

7. For face up printing, make sure the Face Up (rear) Stacker is open and the paper support (1) is extended. Paper is stacked in reverse order and tray capacity is approximately 10 A4 sheets, depending on paper weight, or 1 envelope or 1 sheet of heavier media.

8. Always use the Face Up (rear) Stacker for heavy paper (card stock etc.).

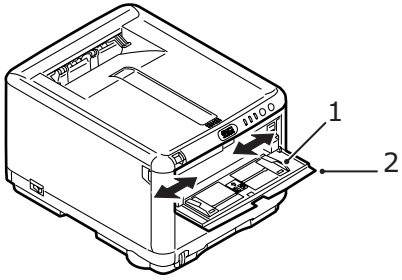


CAUTION!

Do not open or close the rear paper exit while printing as it may result in a paper jam.

MULTI PURPOSE TRAY

1. Open the Multi Purpose Tray and press gently down on the Paper Platform (2) to ensure it is latched down.



2. Adjust the Paper Guides (1) to the size of paper you are going to print on, using the markings on the Paper Platform.
3. Position a sheet of paper on the Paper Platform so that it is gripped in place.
   - > Load your chosen media one sheet at a time.
   - > When printing on headed paper load the paper into the Multi Purpose Tray with pre-printed side up and top edge into the printer.
   - > An envelope should be loaded face up with top edge to the left and short edge facing into the printer.

Set the correct paper size for the Multi Purpose Tray in the Media Menu. (See “Printer functions (User Settings)” on page 70.)

PRINTING FROM WINDOWS

Your printer's menus provide access to many options. See "Using the printer software" on page 66 for more information.

The Windows printer driver also contains settings for many of these items. Where items in the printer driver are the same as those in the menus, and you print documents from Windows, the settings in the Windows printer driver will override those items in the menus.

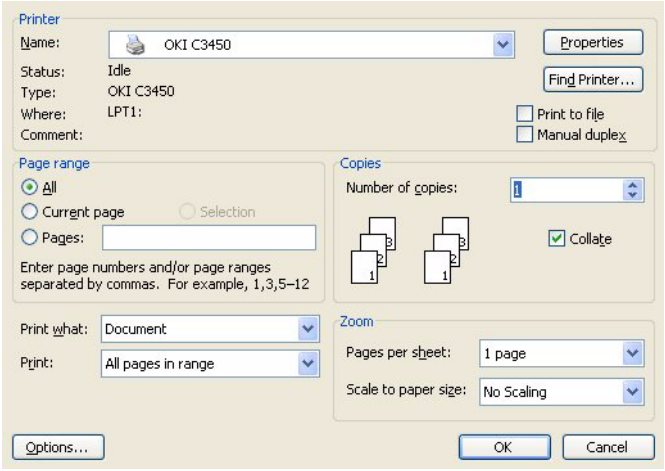
PRINTER DRIVER SETTINGS

A printer driver is a software program that controls a printer. The printer driver feeds data about printing requirements for a document to the printer.

You can make printer driver settings either from Windows **Printers** window (called "Printers and Faxes" in Windows XP) or from within a Windows application. The driver settings you make from the Windows "Printing Preferences" dialog box are essentially default settings and will be remembered from one Windows session to the next. The driver settings you make from within a Windows application, e.g. in the File -> Print dialog box in Microsoft Word, are those required for a particular job and will not be remembered the next time you open this application. In both cases, you can save and name (on the Setup tab) specific sets of driver settings which can be recalled for future use.

PRINTING PREFERENCES IN WINDOWS APPLICATIONS

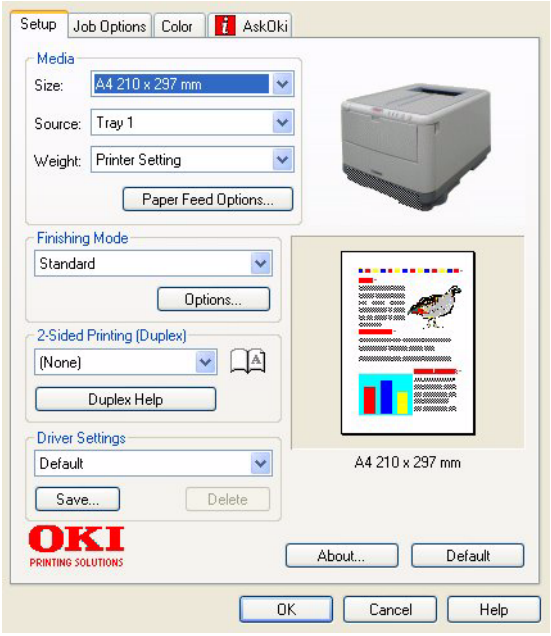
When you choose to print your document from a Windows application program a Print dialog box appears. This dialog usually specifies the name of the printer on which you will print your document. Next to the printer name is a **Properties** button.



When you click **Properties** a new window opens which contains a short list of the printer settings available in the driver, which you can choose for this document. The settings available from within your application are only those which you may want to change for specific applications or documents. Settings you change here will usually only last for as long as the particular application program is running.

SETUP TAB

When you click the **Properties** button from your application's Print dialog, the driver window opens to allow you to specify your printing preferences for the current document.



1. Paper size should be the same as the page size of your document (unless you wish to scale the printout to fit another size), and should also be the same as the size of paper you will feed into the printer.
2. You can choose the source of the paper to feed, which may be Tray 1 (the Cassette Tray) or the Multi Purpose Tray. You can either select the tray from the dropdown list or you can click on the appropriate part of the printer graphic to select your preferred tray.
3. The setting for paper weight should match the type of paper on which you intend to print.
4. Click on the **Paper Feed Options** button to modify your document to fit to paper of a different size and to access advanced Cassette Tray and Multi Purpose tray settings.

5. A variety of document finishing options can be selected, such as normal one page per sheet, or N-up (where N can be a maximum of 16) for printing scaled down pages at more than one page per sheet.

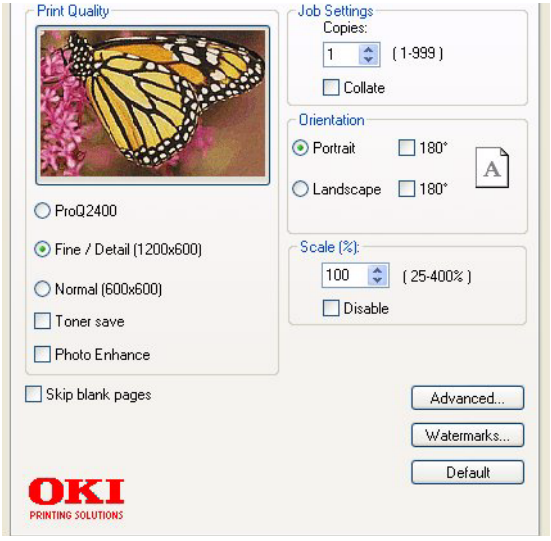
   Select the Poster printing option to print large pages as tiles spread over multiple sheets.

6. You can choose to print on one side of a sheet only or to use 2-sided printing (duplex printing). Your printer allows you to carry out manual duplex printing, meaning you must pass the paper through the printer twice. For more information, see "2-sided printing (Windows only)" on page 50. The **Duplex Help** button also offers guidelines on how to carry out manual duplex printing.

7. If you have changed some printing preferences before and saved them as a set under a specific name, you can recall them under driver settings. Saving driver settings means that you can avoid having to set printing preferences individually each time you need them.

8. Click the **Default** button to restore the default printer settings.

JOB OPTIONS TAB



1. The output resolution of the printed page can be set as follows.
   - > The ProQ2400 setting prints at 600 x 600dpi multi-level. This setting requires the most printer memory and takes the longest to print. It is the best option for printing photographs and reproducing colour details.
   - > The Fine/Detail setting prints at 1200 x 600dpi is the best option for printing vector objects such as graphics and text.
   - > The Normal setting prints at 600 x 600dpi and is suitable for most printing jobs.
2. Select this option to improve the quality of photographic images.
3. Select to help save your toner.
4. Select this option to avoid printing out any blank pages that are in your document.
5. You can select up to 999 copies to print consecutively, although you will need to top up the Cassette Tray during such a long print run.
6. Page orientation can be set to either portrait (tall) or landscape (wide).
7. Your printed pages can be scaled to fit larger or smaller stationery.
8. You can print watermark text behind the main page image. This is useful for marking documents as draft, confidential, etc.
9. Clicking the **Advanced** button gives you access to further settings. For example, you can elect to have black areas printed using 100%K toner (a more matte appearance).
10. Click the **Default** button to restore the default printer settings.

COLOR TAB

1. Control over the colour output of your printer may be performed automatically, or for advanced control, by manual adjustment. The automatic setting will be appropriate in most cases. The other options in this window only become visible when you select a choice other than Auto. For grayscale printing, the printer runs at the fastest print speed (approx. 20ppm) and all pages are printed in black and white.

2. You can choose from a range of colour matching options, depending on the image source for your document. For example, a photograph taken on a digital camera might require different colour matching from a business graphic created in a spreadsheet application. Again, for most general purpose use, Auto is the best choice.

3. Printed output may be made lighter or darker, or the colours made more saturated and vibrant as required.

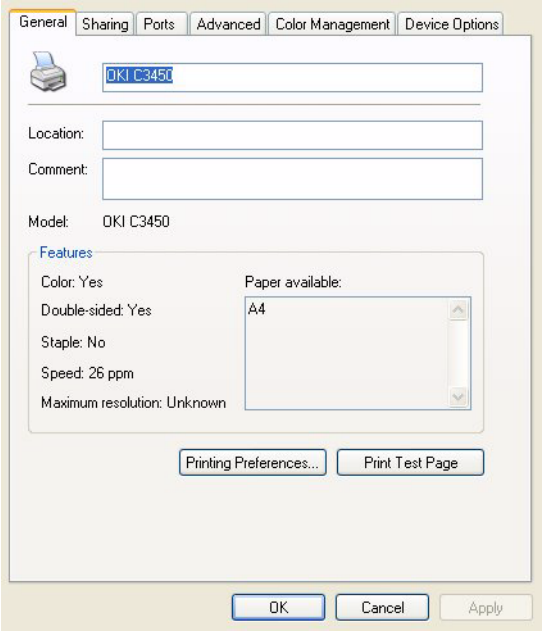
4. Black areas may be printed using 100% cyan, magenta and yellow, giving a more glossy appearance (composite black), or using only black toner (true black), giving a more matte appearance. Choosing the Auto setting allows the driver to make the most appropriate choice based on image content.

5. Click the **Default** button to restore the default printer settings.

SETTING FROM WINDOWS CONTROL PANEL

When you open the driver properties window directly from Windows, rather than from within an application program, a somewhat more extensive range of settings is provided. Changes made here will generally affect all documents you print from Windows applications, and will be remembered from one Windows session to the next.

GENERAL TAB

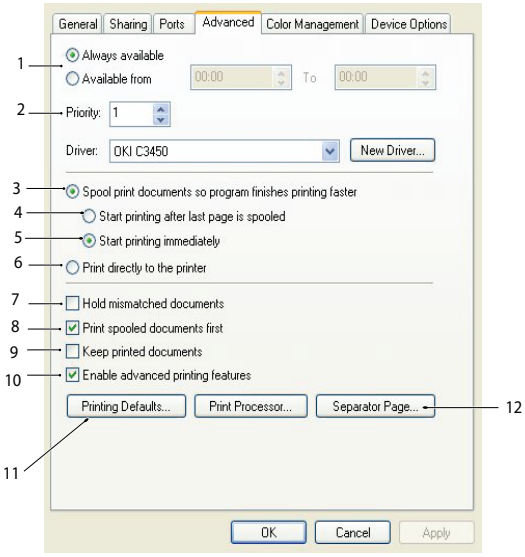


1. This area lists some of the main features of your printer.

2. This button opens the same windows for items which can be set from within application programs, as described earlier in "Printing preferences in Windows applications" on page 25. Changes you make here, however, will become the new default settings for all Windows applications.

3. This button prints a test page to check that your printer is working.

ADVANCED TAB



1. You can specify which times of day your printer will be available.

2. Indicates current priority, from 1 (lowest) to 99 (highest). Highest priority documents will print first.

3. Specifies that documents should be spooled (stored in a special print file) before being printed. The document is then printed in the background, allowing your application program to become available more quickly.

4. This specifies that printing should not start until the last page has been spooled. If your application program needs a lot of time for further computation in the middle of printing, causing the print job to pause for more than a short period, the printer could prematurely assume that the document has finished. Selecting this option would prevent that situation, but printing will be completed a little later, as the start is delayed.

5. This is the opposite choice to the one above. Printing starts as soon as possible after the document begins spooling.

6. This specifies that the document should not be spooled, but printed directly. Your application will not normally be ready for further use until the print job is complete. This requires less disk space on your computer, since there is no spool file.

7. Directs the spooler to check the document setup and match it to the printer setup before sending the document to print. If a mismatch is detected, the document is held in the print queue and does not print until the printer setup is changed and the document restarted from the print queue. Mismatched documents in the queue will not prevent correctly matched documents from printing.

8. Specifies that the spooler should favour documents which have completed spooling when deciding which document to print next, even if completed documents are lower priority than documents which are still spooling. If no documents have completed spooling, the spooler will favour larger spooling documents over shorter ones. Use this option if you want to maximise printer efficiency. When this option is disabled the spooler chooses documents based only on their priority settings.

9. Specifies that the spooler should not delete documents after they are completed. This allows documents to be re-submitted to the printer from the spooler instead of printing again from the application program. If you use this option frequently it will require large amounts of disk space on your computer.

10. Specifies whether advanced features, such as page order and pages per sheet, are available, depending on your

printer. For normal printing keep this option enabled. If compatibility problems occur you can disable the feature. However, these advanced options may then not be available, even though the hardware might support them.

11. This button provides access to the same setup windows as when printing from applications. Changes made via the Windows Control Panel become the Windows default settings.

PRINTING FROM MAC

Mac OS 9 is not supported.

MAC OS X

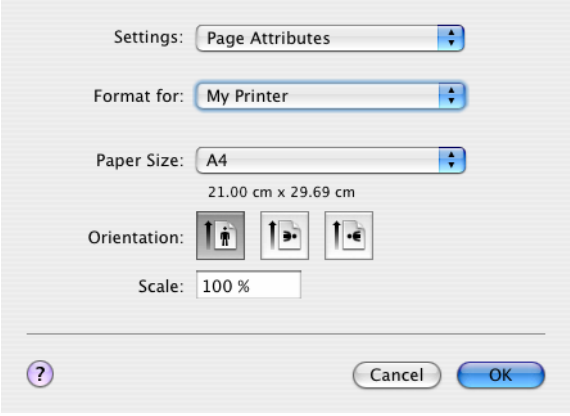
The information in this section is based on Mac OS X Tiger (10.4). Other versions such as Panther (10.3) and Jaguar(10.2) versions may appear slightly different, but the principles are the same.

SETTING PRINTING OPTIONS

You can choose your printer and select options for how you want your documents to print from the Print dialog box.

To set your printer options:

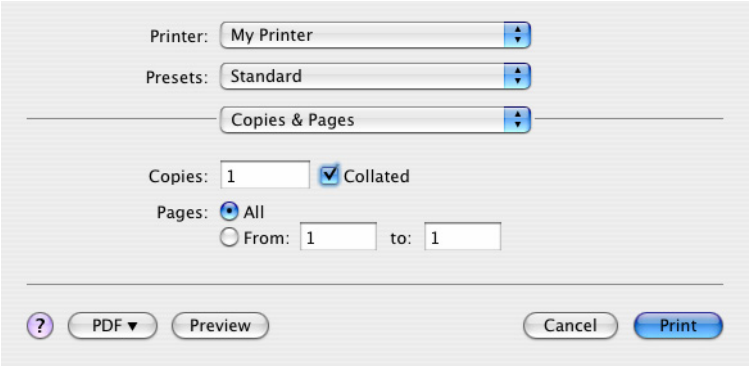
1. Open the document you want to print.
2. To change the paper size or page orientation, select File > Page Setup.



3. Close the Page Setup dialog box.
4. Select File > Print.

5. Select your printer from the Printer drop-down menu.

6. To change any printer driver settings, select the required options from the "Settings" drop-down menu. You can select more options from the Copies & Pages menu. For a description of these options, see "Print options - Copies & pages" on page 38.

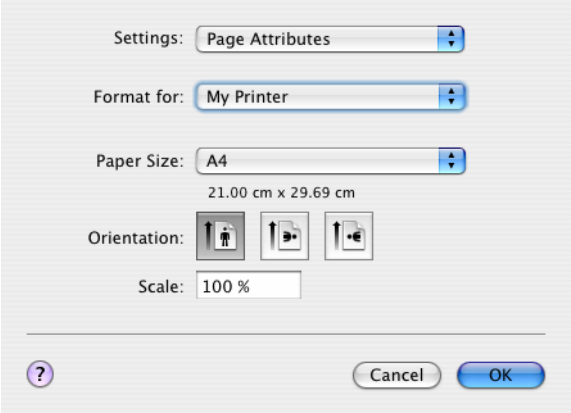


7. Click the **Print** button.

SAVING PRINTING OPTIONS

You can save a set of printer driver options to use for future documents.

1. Open the document you want to print.
2. To change the paper size or page orientation, select File > Page Setup.



3. Select Save As Default from the Settings drop-down menu.
4. To save the current printer driver settings as a preset, select Save As from the Preset menu.
5. Enter a name for your preset and click OK.

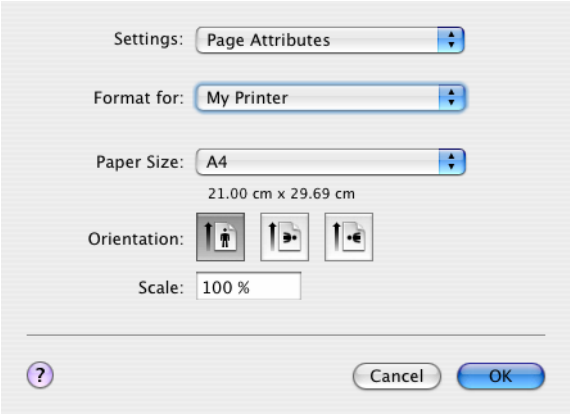
CHANGING THE DEFAULT PRINTER AND PAPER SIZE

The following steps describe how to change your default printer and the paper size options.

1. Select Apple menu > System Preferences.
2. Click the Print & Fax icon.
3. Select your printer in the "Selected Printer in Print Dialog" drop-down menu.
4. Select your required paper size in the "Default Size in Page Setup" drop-down menu.

PAGE SETUP OPTIONS

This section provides a description of the page setup options available to you.



Page Attributes

You can select "Save As Default" to use the current Page Setup settings as a standard for all documents.

Format for

Allows you to select your printer model before changing options such as Paper size and Orientation.

Paper Size

Select a paper size to match your document and the paper loaded in the printer. The paper margin is 4.2mm at all edges. To specify your own paper sizes, select "Manage Custom Sizes..."

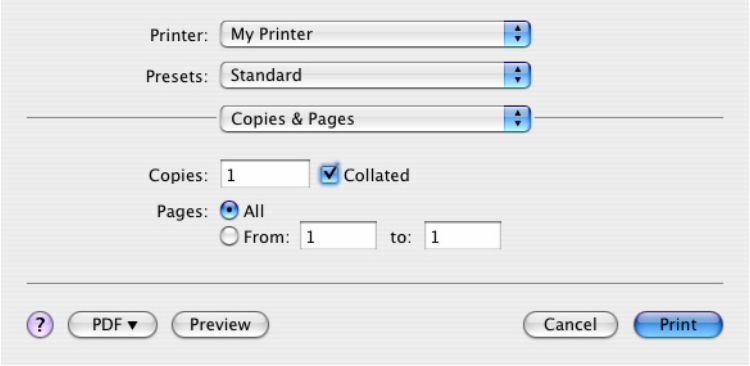
Scale

You can scale documents up or down to fit onto different paper sizes. To fit your document on a specific paper size, select Options in the Paper Handling drop-down menu in the Print Options dialog box.

Orientation

You can select a portrait or landscape option. When using landscape, you can rotate the document 180 degrees.

PRINT OPTIONS - COPIES & PAGES



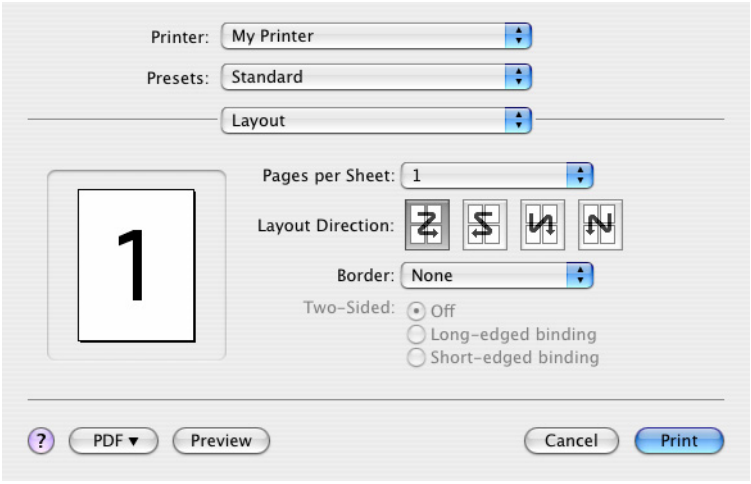
Copies

This option allows you to enter the number of copies to print. If you select Collate, all pages of the document will print before the next copy prints.

Pages

You can select whether to print all pages of a document or just a section of it.

Layout

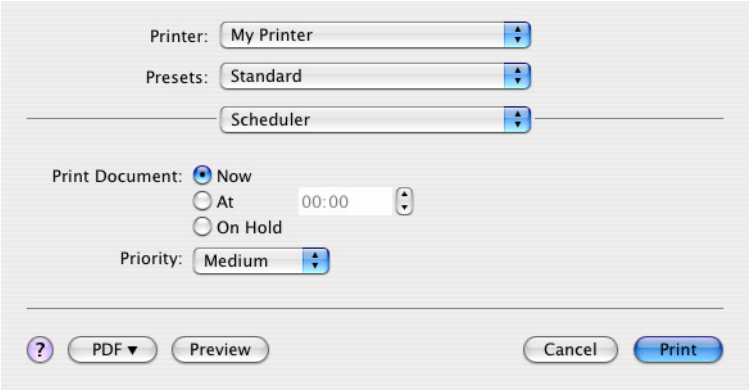


Pages per sheet

You can shrink multiple pages and print them on a single sheet of paper. For example, choosing 4-up will tile four of your document's pages across a single sheet of paper.

You can control the order in which the documents are tiled and also choose to surround each document page with a border.

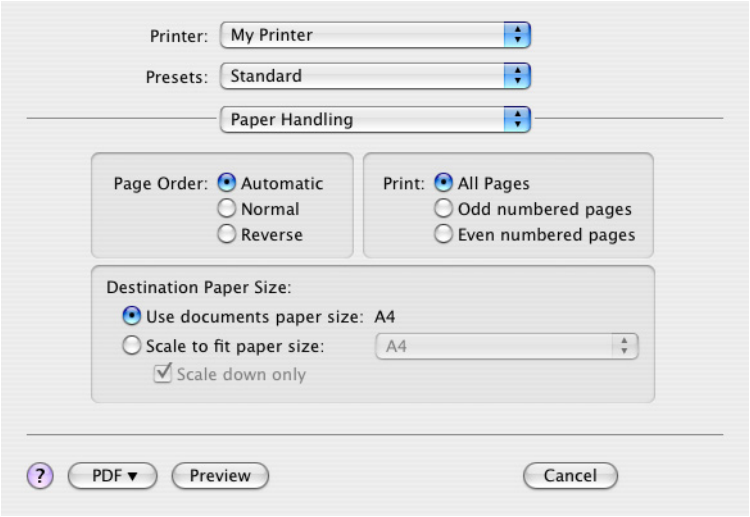
Scheduler



This option lets you choose whether to print your document immediately, or defer printing until later. You can also assign a priority to a print job.

These features are useful if you are printing large documents that take a long time to print.

Paper handling



Page order

You can choose to print your document in the normal page order (1,2,3..) or reverse order (..3,2,1).

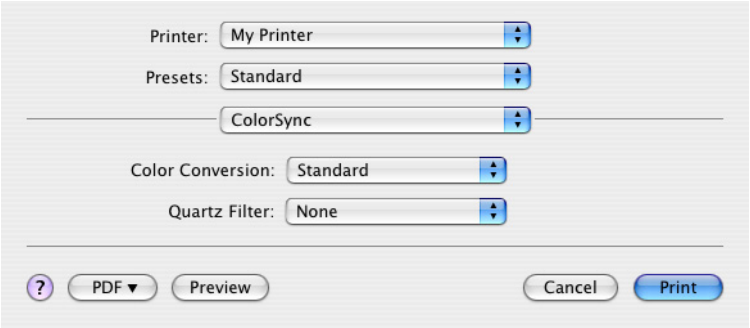
Print

This option allows you to choose whether to print only odd or even numbered pages. This is useful if you are using manual duplex for which you first print all odd pages, re-insert the paper in the printer and then print all even pages.

Destination paper size

Scale documents to fit on the size of paper in your printer. For example, you can take a document formatted for A3 and print it on A4 paper using an A4 printer.

ColorSync



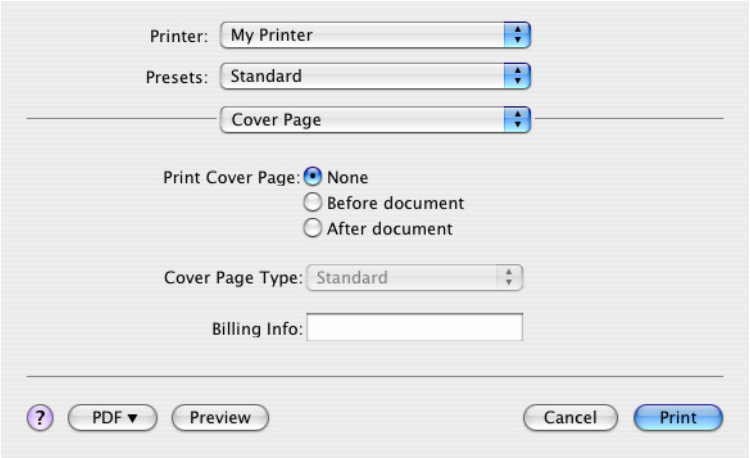
Color conversion

For Color Conversion, Standard is the only option available for your printer model.

Quartz Filter

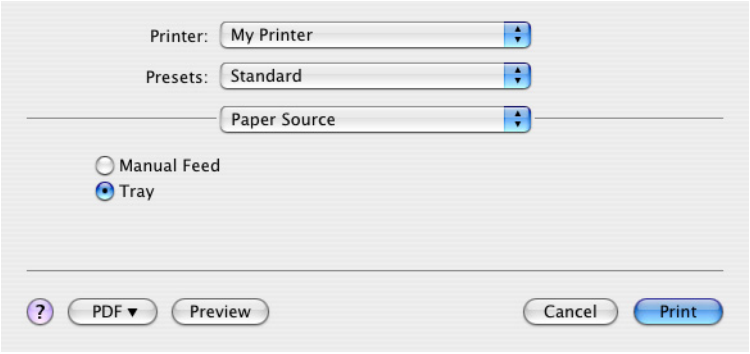
Choose a Quartz filter if you wish to apply a special effect to your print job, such as Sepia or Blue Tone. This is only available on Mac OS X 10.3 (Panther) or later versions.

Cover page



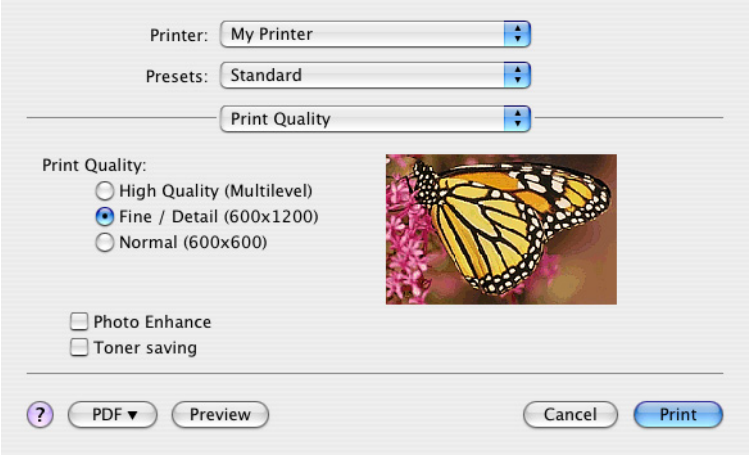
Choosing a cover page may help you to identify your printed document in a large pile of paper. This is useful in a busy office with many people sharing the printer.

Paper source



This option allows you to select which paper tray to use for your print job.

Print quality



Print quality

Use this option to select the print resolution. The ProQ2400 setting produces the best graphic images, but these images can take longer to print.

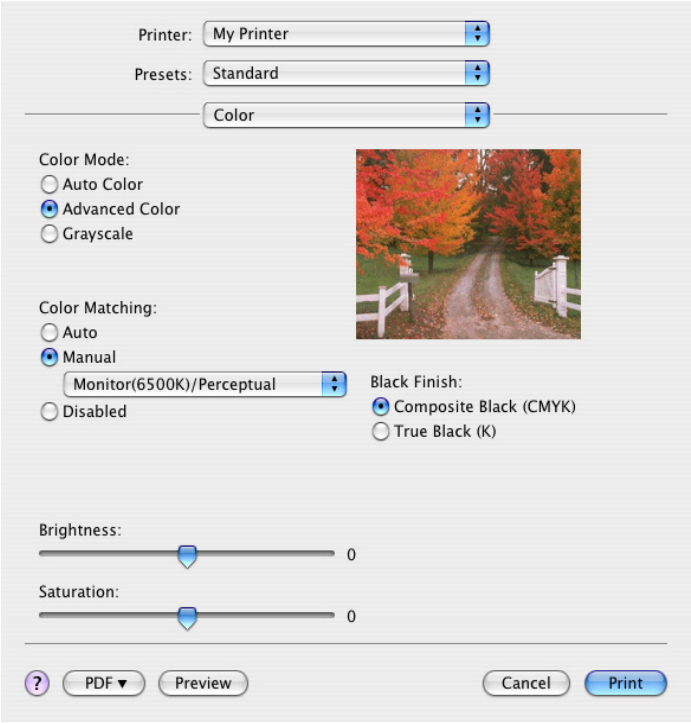
Photo Enhance

Use Photo Enhance to significantly improve quality when printing images. The printer driver analyses any photographic images and processes them to improve the overall appearance. This setting cannot be used together with the ProQ2400 print quality setting.

Toner Saving

Toner saving uses less toner when printing your document. This is best suited to draft text documents as it lightens the print significantly.

Color



Color mode

COLOR MODE	DESCRIPTION
Auto Color	The driver selects the most appropriate color settings.
Advanced Color	Allows you to manually adjust color and black and white settings or select.
Grayscale	Convert all colors to shades of grey.

Color matching

COLOR	DESCRIPTION
Monitor (6500K) Perceptual	Optimised for printing photos. Colors are printed with emphasis on saturation.
Monitor (6500K) Vivid	Optimised for printing photos, but with even more saturated colors.
Monitor (9300K)	Optimised for printing graphics from applications such as Microsoft Office. Colors are printed with emphasis on Lightness.
Digital Camera	Results will vary depending on the subject and conditions the image was taken.
sRGB	The printer reproduces the sRGB color space. This might be useful if color matching from an sRGB input device such as a scanner or digital camera.

Black Finish

Use this option to control the way black is printed in color documents. Select Composite Black (CMYK) to use all 4 toner colors to represent black. This option is recommended for color photos. Select True Black (K) to use 100% black toner to represent black. This option is recommended for text and business graphics.

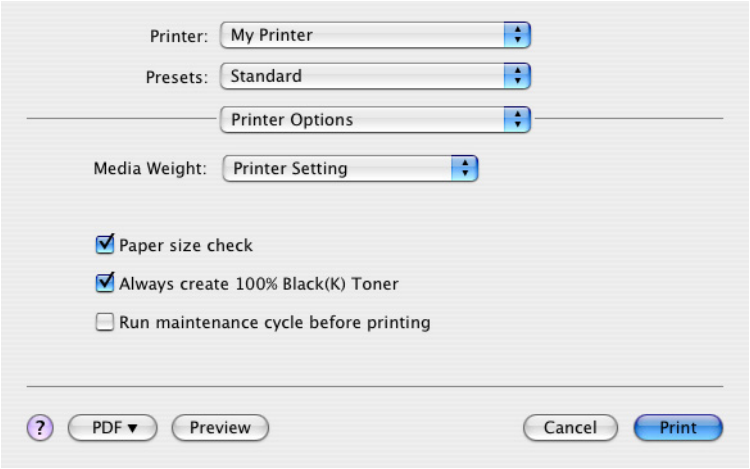
Brightness / Saturation

This option allows you to increase brightness for a lighter print. Modify saturation to change the strength (or purity) of a color.

If the printed colors are too strong, reduce saturation and increase brightness. As a general rule, reduce saturation by the same amount as you increase brightness. For example, if you reduce saturation by 10, increase brightness by 10 to compensate.

PRINTER SETUP OPTIONS

PRINTER OPTIONS



Media weight

Select the thickness or type of paper in the printer. It is important to set this correctly as it affects the temperature at which the toner is fused to the paper. For example, if you are printing on normal A4 paper, do not select Labels as this may cause toner smearing and paper jams.

Paper size check

Select Paper Size check if you want the printer to warn you when the document paper size is different from the paper in the printer.

A warning message is displayed and printing continues when you load the correct paper in the tray and press ON LINE. When this option is deselected, the printer uses the paper loaded in the selected tray regardless of the document size.

Feed manually from Multi Purpose Tray

Select this option if you want the printer to wait until you press the **ON LINE** button when feeding from the Multi Purpose Tray. This can be useful if printing on envelopes.

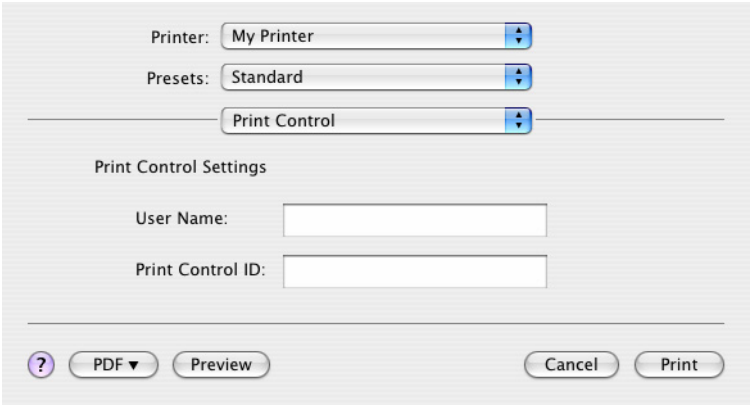
Always create 100% black (K) toner

Select this option if you want the printer to always use only black (K) toner when printing pure black (RGB = 0,0,0). This is effective even when Composite Black (CMYK) is selected in the color options.

Run maintenance cycle before printing

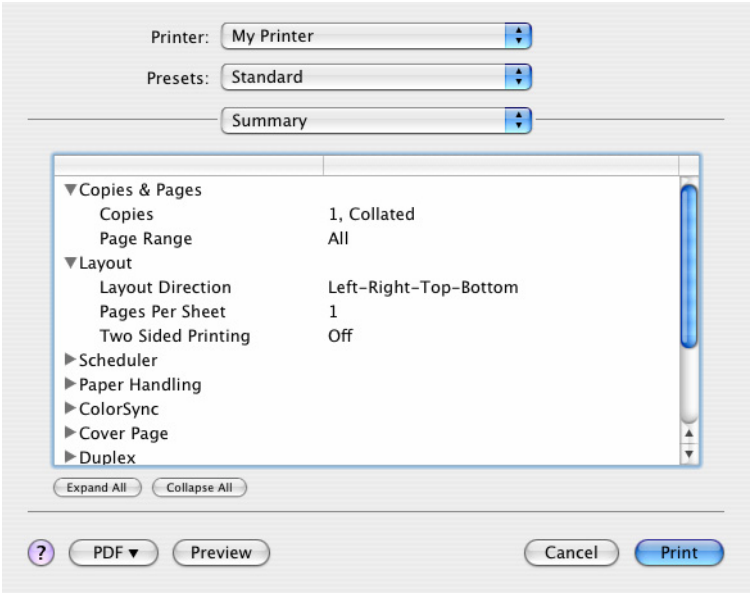
Depending on printing habits and usage patterns, running the maintenance cycle before printing may ensure the best possible print quality. This feature uses the printer's image drums and transfer belt. The life of these printer consumables may be shortened if the printer runs a maintenance cycle frequently.

Print control



If you are using the Windows Print Control Server software to manage printers, enter your assigned user name and ID. This information is sent to the printer with your print job and is recorded by the printer.

Summary



This option displays a summary of all selected print options for the current job.

PRINTING

This chapter describes how to carry out basic printing tasks using your printer.

TEST PRINTING

PRINT A DEMO PAGE

Switch on the printer and allow it to warm up. Press the **ON LINE** button on your printer and hold down for 5 seconds. A demo page should print.

PRINT A STATUS PAGE

Switch on the printer and allow it to warm up. To print a status page, hold down the **ON LINE** button on your printer for 2 seconds. A status page should print.

2-SIDED PRINTING (WINDOWS ONLY)

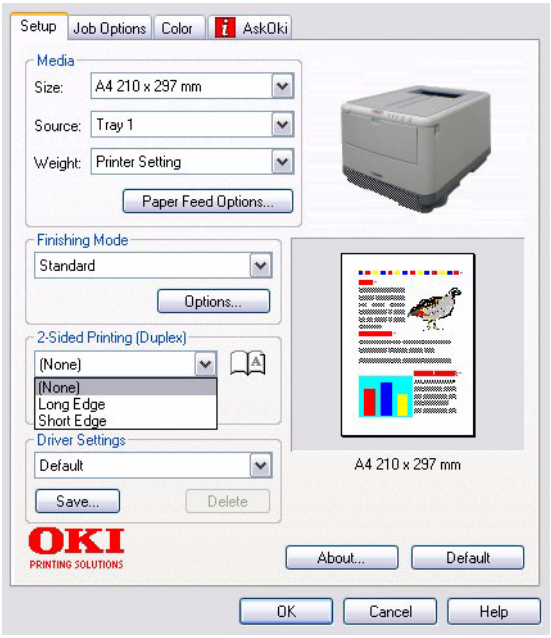
To carry out 2-sided, or Manual Duplex Printing you must pass paper through the printer twice. You can carry out 2-sided printing using the Cassette Tray or the Multi Purpose Tray.

2-sided Printing is supported on Windows operating systems only.

MANUAL DUPLEX PRINTING USING THE CASSETTE TRAY

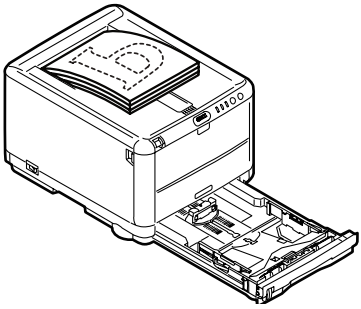
1. Ensure that there is enough paper in the cassette tray to carry out the print job.

2. Select File -> Print and click the **Properties** button. In the 2-sided printing drop down menu, select either "Long Edge" or "Short Edge" according to your printing preferences. If you require further information, click the **Duplex Help** button. Then, Click the **Print** button.

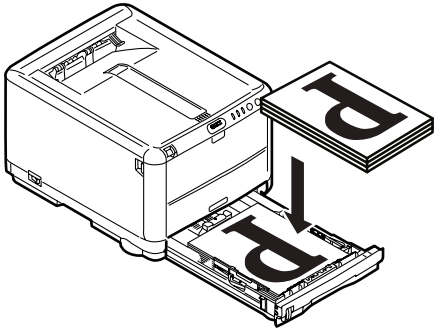


3. Every second page of your document is printed first. When this is complete, the following a message appears on screen prompting you to take the paper, flip it and replace it in the Cassette Tray.

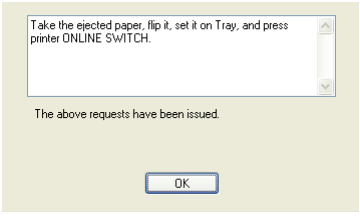
4. Open the Cassette Tray.



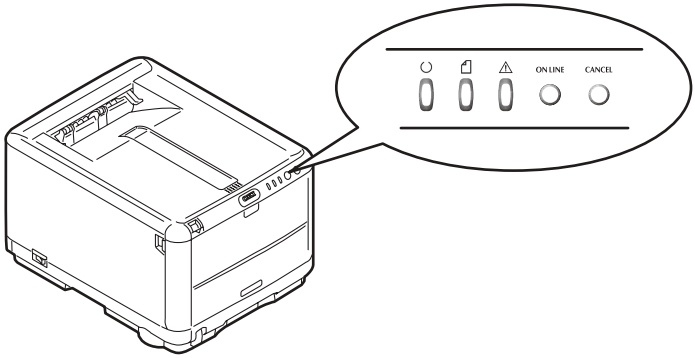
5. Take the printed paper from the Output Stacker and place it in the Cassette Tray with the printed side facing up and the bottom of the page facing into the printer.



6. Close the Cassette Tray and press the **ON LINE** button as directed in the status message. The message window



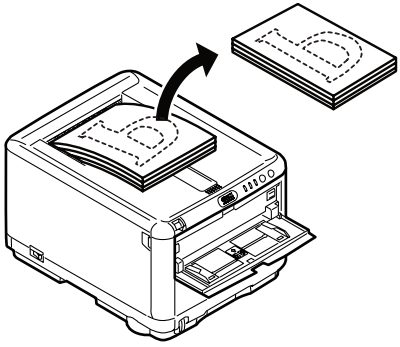
should disappear from your screen and the document finishes printing the remaining pages of your document.



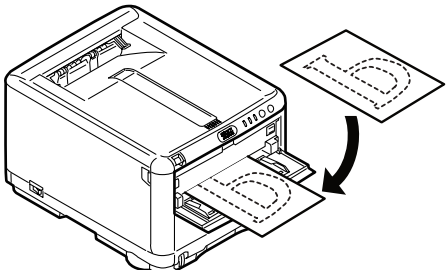
MANUAL DUPLEX PRINTING USING THE MULTI PURPOSE TRAY

NOTE:
When using the Multi Purpose Tray, feed pages one sheet at a time.

1. Position the paper guides on the Multi Purpose Tray according to the paper size.
2. Place paper one sheet at a time in the Multi Purpose Tray. The paper is automatically gripped in position.
3. Select File -> Print to display the Print dialog box.
4. Click the **Properties** button. On the 2-sided printing drop down menu, select either "Long Edge" or "Short Edge" according to your printing preferences. If you require further information, click the **Duplex Help** button
5. When every second page has printed, take the paper from the output stacker.



6. Set the paper one page at a time in the Multi Purpose Tray with the printed side facing up and the bottom of the page facing into the printer. Ensure that the paper is gripped in place.



7. Press the **ON LINE** button. The remaining pages of your document print on the blank side of the paper.

PRINTING ON DIFFERENT MEDIA

This section describes how to print on material other than normal A4 paper.

PRINTING ON LEGAL PAPER

When printing on legal paper you need to change the media settings for the printer software to get the best results.

You can either set a default driver for each type of media or you can change the print media settings through your Windows printer properties or Mac Print options any time you print on different media.

PRINTING ON ENVELOPES

NOTE:
Do not use envelopes with clear windows. Use paper envelopes only.

1. In either the cassette tray or the Multi Purpose Tray, adjust the paper guides using the indicators marked on the printer.
2. Place your envelopes in the tray, face up with the short edge facing into the printer and the flap to the right. Do not add more than 10 envelopes at a time.
3. From your operating system, access the print media menu and select your envelope size.
4. Print in the usual manner for your operating system software.

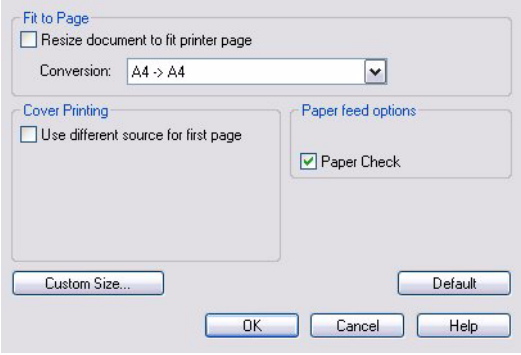
SETTING OTHER PRINTING OPTIONS

This sections briefly describes how to set printing options for your particular print job.

FIT TO PAGE PRINTING

You can choose to print your document on larger or smaller sized paper depending on the size of print media available to you.

1. Insert paper in the Cassette Tray or Multi Purpose Tray in the usual manner.
2. Select File -> Print and click the **Properties** button. Then click the **Paper Feed Options** button. Under Fit to Page, select the page size from the Conversion drop down list.



PRINTING MULTIPLE PAGES TO ONE SHEET

In Windows, open the Printing Preferences Setup Tab. Under Finishing Mode, select the number of document pages that you want to print per sheet of paper from the drop down list.

PRINTING COLOR DOCUMENTS IN BLACK AND WHITE

You can save both time and toner by printing color documents in black and white. Access the Color tab in printing properties and select the “Monochrome” option in Windows or the Grayscale option in Mac before printing your document.

CANCELLING A PRINT JOB

You can cancel a print job from your software application, from the print queue or by using the **CANCEL** button on your printer.

PRINTING STATE	HOW TO CANCEL
Document has not started printing	Try to cancel printing job within software application
Document is waiting in a print queue	Delete print job from Print Queue. You can access the print queue from the System Tray in Windows or the Print Center Queue in Mac.
Document has started printing	Press the **CANCEL** button on your printer. Any pages that are already moving through the printer will be printed. You will need to press **CANCEL** for each print job you wish to stop.

COLOUR PRINTING

The printer drivers supplied with your printer provide several controls for changing the colour output. For general use the automatic settings will suffice, providing reasonable default settings that will produce good results for most documents.

Many applications have their own colour settings, and these may override the settings in the printer driver. Please refer to the documentation for your software application for details on how that particular program's colour management functions.

FACTORS THAT AFFECT THE APPEARANCE OF PRINTS

If you wish to manually adjust the colour settings in your printer driver, please be aware that colour reproduction is a complex topic, and there are many factors to take into consideration. Some of the most important factors are listed below.

Differences between the range of colours a monitor or printer can reproduce

- Neither a printer nor a monitor is capable of reproducing the full range of colours visible to the human eye. Each device is restricted to a certain range of colours. In addition to this, a printer cannot reproduce all of the colours displayed on a monitor, and vice versa.
- Both devices use very different technologies to represent colour. A monitor uses Red, Green and Blue (RGB) phosphors (or LCDs), a printer uses Cyan, Magenta, Yellow and Black (CMYK) toner or ink.
- A monitor can display very vivid colours such as intense reds and blues and these cannot be easily produced on any printer using toner or ink. Similarly, there are certain colours, (some yellows for example), that can be printed, but cannot be displayed accurately on a monitor. This disparity between monitors and printers is often the main reason that printed colours do not match the colours displayed on screen.

Viewing conditions

A print can look very different under different lighting conditions. For example, the colours in a print may look different when viewed standing next to a sunlit window, compared to how they look under standard office fluorescent lighting.

Printer driver colour settings

The driver settings for Manual colour can change the appearance of a print. There are several options available to help match the printed colours with those displayed on screen.

Monitor settings

The brightness and contrast controls on your monitor can change how your document looks on-screen. Additionally, your monitor's colour temperature influences how "warm" or "cool" the colours look.

There are several settings found on a typical monitor:

- 5000k Warmest; yellowish lighting, typically used in graphic art environments.
- 6500k Cooler; approximates daylight conditions.
- 9300k Cool; the default setting for many monitors and television sets.

(k = degrees Kelvin, a measurement of temperature.)

How your software application displays colour

Some graphics applications such as Corel Draw or Adobe Photoshop may display colour differently from "Office" applications such as Microsoft Word. Please see your application's on-line help or user manual for more information.

Paper type

The type of paper used can also significantly affect the printed colour. For example, a printout on recycled paper can look duller than one on specially formulated high-quality paper.

TIPS FOR PRINTING IN COLOUR

The following guidelines may help you to achieve good colour output from your printer.

PRINTING PHOTOGRAPHIC IMAGES

Use the Monitor (6500k) Perceptual setting.

If the colours look too dull, try the Monitor (6500k) Vivid or Digital Camera settings.

PRINTING FROM MICROSOFT OFFICE APPLICATIONS

Use the Monitor (9300k) setting. This may help if you are having problems with specific colours from applications such as Microsoft Excel or Microsoft Powerpoint.

PRINTING SPECIFIC COLOURS (E.G. A COMPANY LOGO)

There are 2 utilities on your printer driver CD-ROM that can help match specific colours:

Colour Correct Utility

Colour Swatch Utility

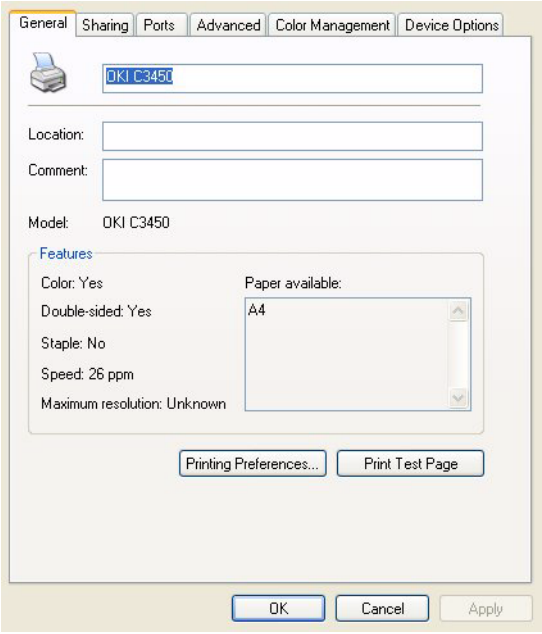
ADJUSTING THE BRIGHTNESS OR INTENSITY OF A PRINT

If the print is too light/dark, you can use the Brightness control to adjust it.

If the colours are too intense/not intense enough, use the Saturation control.

ACCESSING THE COLOUR MATCHING OPTIONS

The Colour Matching options in the printer driver can be used to help match your printed colours to the ones displayed on your monitor or from some other source, such as a digital camera.



To open colour matching options from the Windows Control Panel:

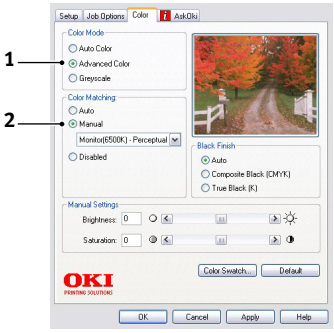
1. Open the **Printers** window (called "Printers and Faxes" in Windows XP).
2. Right-click the printer name and choose **Properties**.
3. Click the **Printing Preferences** button (1).

To open colour matching options from within a Windows application:

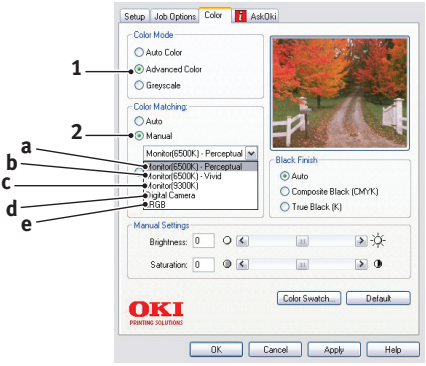
1. Choose **File—Print...** from the application's menu bar.
2. Click the **Properties** button next to the printer name.

SETTING THE COLOUR MATCHING OPTIONS

1. On the **Colour** tab select **Advanced Colour** ((1) below) for Colour Matching.



2. Choose the **Manual** colour setting (2) and select from the following options:



(a) Monitor (6500k) Perceptual

Optimised for printing photographs. Colours are printed with emphasis on saturation.

(b) Monitor (6500k) Vivid

Optimised for printing photographs, but with even more saturated colours than the Monitor (6500k) Perceptual setting.

(c) Monitor (9300k)

Optimised for printing graphics from applications such as Microsoft Office. Colours are printed with emphasis on Lightness.

(d) Digital Camera

Optimised for printing photographs taken with a digital camera.

Your results will vary depending on the subject and the conditions under which the photograph was taken.

(e) sRGB

The printer will try to reproduce the sRGB colour space. This may be useful if colour matching from an sRGB input device such as a scanner or digital camera.

USING THE COLOUR SWATCH FEATURE

To use the Colour Swatch feature, you must install the Colour Swatch Utility. This is supplied on the CD-ROM that was supplied with your printer.

The Colour Swatch function prints charts which contain a range of sample colours. Note that this is not the full range of colours that the printer can produce. Listed on each sample colour are the corresponding RGB (Red, Green, Blue) values. This can be used to pick specific colours in applications that allow you to choose your own RGB values. Simply click the **Colour Swatch** button (1) and choose from the options available.

An example of using the Colour Swatch function:

You wish to print a logo in a particular shade of red. The steps you would follow are:

1. Print a colour swatch, then select the shade of red that best suits your needs.
2. Take a note of the RGB value for the particular shade that you liked.
3. Using your program's colour picker, enter these same RGB values, and change the logo to that colour.

The RGB colour displayed on your monitor may not necessarily match what was printed on the colour swatch. If this is the case, it is probably due to the difference between how your monitor and printer reproduce colour. Here, it is unimportant since your primary objective is to print the required colour.

USING THE COLOUR CORRECT UTILITY

The Oki Colour Correct Utility is provided on your printer driver CD-ROM. You must install it separately since it is not installed along with the printer driver.

The Colour Correct utility has the following features:

- Microsoft Office palette colours can be individually adjusted. This is useful if you want to change how a specific colour is printed.
- Colours can be adjusted by changing Hue, Saturation and Gamma. This is useful if you wish to change the overall colour output.

Once these colour adjustments have been made, the new settings can be selected from the printer driver Colour tab.

To select adjustments made with the Colour Correct Utility:

1. From your application program, click **File** and point to **Print**.
2. Click **Properties**. This displays the printer driver options.
3. Click the **Colour** tab.
4. Click **Advanced Colour**.
5. Click **User Defined**.

Select the colour adjustment you made with the Colour Correct Utility.

USING THE PRINTER SOFTWARE

STATUS MONITOR (WINDOWS ONLY)

The Status Monitor software is distinct from and installed separately from the driver software.

NOTE
For reliable operation of the Status Monitor, ensure that the USB cable is of length 2m maximum.

The Status Monitor provides a readable indication of the printer status as displayed on the indicator LEDs on the Operation Panel (see "The Operation Panel" on page 12.) and allows you to access the printer menus (listed at the end of this chapter) to set printer parameters such as paper size etc.

NOTE
The Status Monitor is available to Windows operating systems only. Mac OS X has a "Printer Menu" utility that allows you to change the user settings outlined in this chapter.

USING THE STATUS MONITOR

NOTE
You are advised to refer to the extensive on-line help as required when using the Status Monitor.

Viewing the status of the printer, and viewing or changing the printer menu settings are carried out though the Status Monitor. Click on **Start**, **All Programs** and select **Okidata OKI 3450 Status Monitor**. The current printer status is shown.

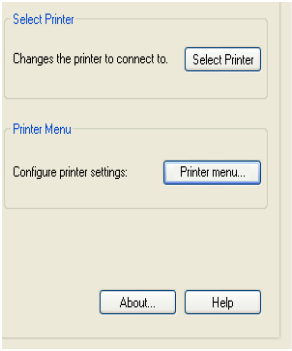
PRINTER STATE TAB

This tab is visible by default on opening the Status Monitor and displays detailed information about the status of the printer.

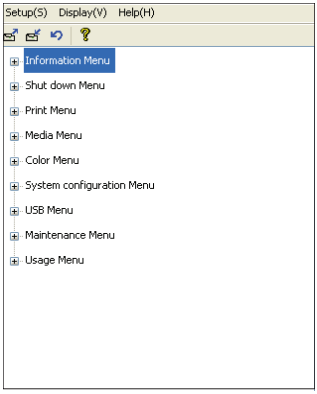
PRINTER SETUP TAB

Selecting this tab provides access to the **Select Printer** button, which, when selected, allows you to monitor the status any printer configured for use with your computer.

The Printer Menu button enables you to access the printer menu settings.

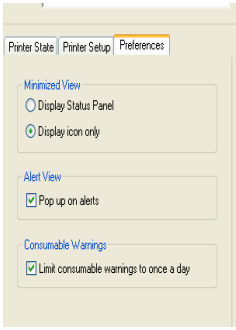


From the printer menu, you can configure your printer settings.



PREFERENCES TAB

Selecting this tab provides the means to choose the information displayed by the Status Monitor and how/when the Status Monitor appears.



The default Alert view setting (Pop up on alerts) ensures that the Status Monitor pops up to inform you of a condition that requires your attention e.g. paper out in Cassette Tray.

PRINTER FUNCTIONS (USER SETTINGS)

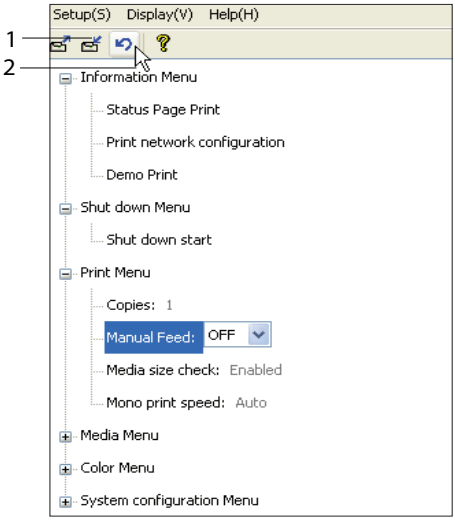
The printer settings made from the Status Monitor can be seen collectively on a printed Menu Map (or Status Page). To print a status page, press printer **ON LINE** button and hold for 2 seconds.

USER SETTINGS

1. On the Status Monitor Setup tab, click **Printer Menu**. The User Settings Print Menu appears. You change user settings options from this menu.

2. To save your changes, click the **Apply the changed settings** icon (1), in the top left hand corner.

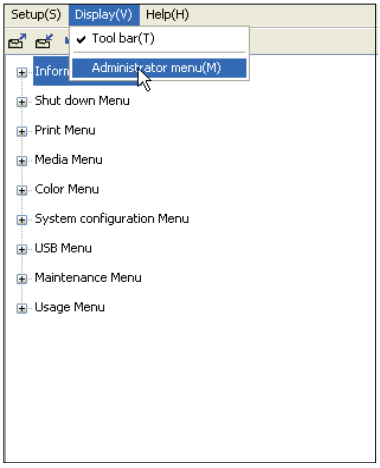
To undo a change, click the **Undo changed settings** icon (2).



Administrator Settings

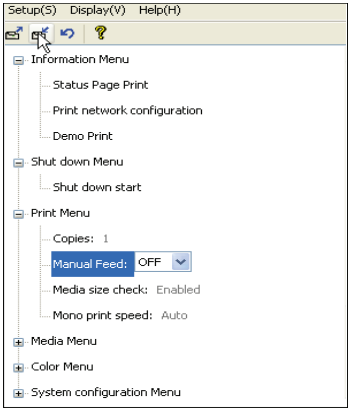
This menu is intended to be used only by designated staff.

1. On the User Settings window, select **Display -> Administrator Menu**. The User Settings menu is updated to include the Administrator menu options.

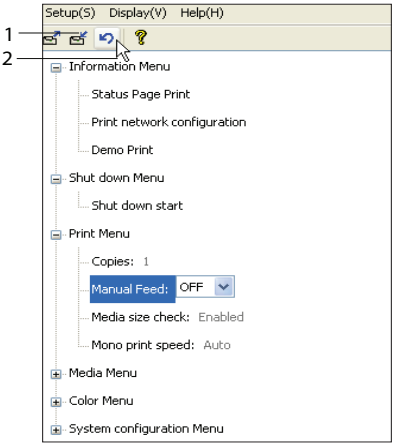


The Administrator Settings menu has the settable items, including access to the user menus. If you disable a menu from this tab, it does not appear on the User Settings tab.

2. To save your changes, click the **Apply the changed settings** icon (as shown below), in the top left hand corner.



To undo a change, click the **Undo changed settings** icon.



NOTE
*You can access the printer menu settings window direct by clicking **Start**, **All Programs** and selecting **Okidata OKI 3450.***

It should be noted that many of these settings can be, and often are, overridden by settings made in the printer drivers. However, several of the driver settings can be left at "Printer Setting", which will then default to the settings entered in these printer menus.

Factory default settings are shown in **bold type** in the following tables.

PRINTER MENU UTILITY (MAC ONLY)

There is no status monitor in Mac. You can change printer user settings through the Printer Menu utility.

You can use Windows Print Control Server Software to manage your printer in Mac. For more information, see "Printing From Mac" on page 34.

PRINTER MENUS

INFORMATION MENU

This menu provides a quick method of listing various items stored within the printer.

INFORMATION MENU		
ITEM	**ACTION**	**EXPLANATION**
PRINT MENU MAP / STATUS PAGE PRINT	EXECUTE	Prints complete menu listing with current settings shown.
PRINT NETWORK CONFIGURATION	EXECUTE	Prints a page that lists the printer's current network settings.
DEMO PRINT	EXECUTE	Prints demo page.

SHUT DOWN MENU

This menu provides an option to ensure that your printer can be safely switched off.

SHUT DOWN MENU		
ITEM	**ACTION**	**EXPLANATION**
SHUT DOWN START	EXECUTE	Prepares printer to be safely switched off.

PRINT MENU

This menu provides adjustment of various print job related functions.

PRINT MENU		
ITEM	**SETTINGS**	**EXPLANATION**
COPIES	**1**-999	Enter the number of copies of a document to be printed from 1 to 999.
MANUAL FEED (Multi Purpose Tray)	**ON**/OFF	Selects the default tray for paper feed, Cassette Tray or Multi Purpose Tray.
MEDIA SIZE CHECK	**ENABLE** DISABLE	Determines whether the printer checks the size of paper loaded matches that required for the document sent to print.
MONO-PRINT SPEED	**AUTO** COLOUR NORMAL	Selects the printer's print engine speed for the type of print media in use.

MEDIA MENU

This menu provides adjustment to suit a wide range of print media.

MEDIA MENU		
ITEM	**SETTINGS**	**EXPLANATION**
TRAY - MEDIA SIZE	**A4 /** A5 / A6 / B5 LETTER EXECUTIVE LEGAL14 LEGAL13 LEGAL13.5 CUSTOM	Selects the size of paper loaded in Tray 1. For CUSTOM setting see X-DIMENSION and Y-DIMENSION later in this table.
TRAY - MEDIA TYPE	**PLAIN** LETTERHEAD BOND RECYCLED ROUGH USERTYPE1 – 5	Selects the type of media loaded in this tray. This will help the printer to adjust its internal operating parameters, such as engine speed and fusing temperature, to better accommodate the media to be fed. For example, letterhead may benefit from a slightly lower fusing temperature to ensure that its ink does not offset. Usertype 1 – 5 will be displayed only when registered from the host PC.
TRAY - MEDIA WEIGHT	LIGHT (64-74g/m²) **MEDIUM** (75-90g/m²) HEAVY (91-120g/m²)	Adjusts the printer for the weight of paper stock loaded in this tray.

MEDIA MENU		
ITEM	**SETTINGS**	**EXPLANATION**
MANUAL (Multi Purpose Tray) - PAPER SIZE	**A4** / A5 / A6 / B5LETTER EXECUTIVE LEGAL14 LEGAL13 LEGAL13.5 CUSTOM COM-9 ENVELOPE COM-10 ENVELOPE MONARCH ENV DL ENVELOPE C5 ENVELOPE BANNER 210 x 900 BANNER 215 x 900 BANNER 215 x 1200	Selects the size of paper to be fed from the Multi Purpose Tray. For CUSTOM setting see X-DIMENSION and Y-DIMENSION later in this table.
MANUAL (Multi Purpose Tray) - MEDIA TYPE	**PLAIN** LETTERHEAD LABELS BOND RECYCLED CARD STOCK ROUGH USERTYPE1 – 5	Selects the type of media to be fed from the Multi Purpose Tray so that the printer can adjust its internal parameters to better accommodate the selected type of media. Usertype 1 – 5 will be displayed only when registered from the host PC.
MANUAL (Multi Purpose Tray) - MEDIA WEIGHT	MEDIUM (75-90g/m²) HEAVY (91-120g/m²) ULTRA HEAVY (121-203g/m²)	Selects the media weight to be fed from the Multi Purpose Tray.
CUSTOM PAPER SIZE - MEDIA SIZE UNIT	**MILLIMETRE** INCH	Selects the unit of measure for the next two items.
CUSTOM PAPER SIZE - MEDIA WIDTH	64-**210**-216 MILLIMETRE	Selects the width of paper defined by the "CUSTOM" settings referred to in the foregoing PAPER SIZE settings.
CUSTOM PAPER SIZE - MEDIA LENGTH	148-**297**-1200 MILLIMETRE	Selects the length of paper defined by the "Custom" settings referred to in the foregoing PAPER SIZE settings. Note that media of up to 1200mm in length can be fed from the Multi Purpose Tray for banner printing.

COLOUR MENU

The printer automatically adjusts colour balance and density at appropriate intervals, optimising the printed output for bright white paper viewed in natural daylight conditions. The items on this menu provide a means of changing the default settings for special or particularly difficult print jobs. Settings revert to their default values when the next print job is complete.

COLOUR MENU		
ITEM	**SETTINGS**	**EXPLANATION**
DENSITY ADJUSTMENT MODE	**AUTO** MANUAL	If set to AUTO, image density will be automatically adjusted at power on, when a new image drum or toner cartridge is installed, and at intervals of 100, 300 and 500 drum counts. If a 500 drum count interval occurs during a print job it will occur at the end of that job, and will take up to 55 seconds. If set to MANUAL, this adjustment will only be performed when initiated by the next menu item.
DENSITY ADJUSTMENT	EXECUTE	Selecting this will perform the auto density set up immediately.
COLOR REGISTRATION ADJUSTMENT	EXECUTE	Performs automatic colour registration adjustment. Normally this is done on power on and when the top cover is opened and then closed. This process accurately aligns the cyan, magenta and yellow images to the black image.
POSITION REG FINE ADJUSTMENT		Performs fine adjustment of image timing in relation to the black image component.
C REG FINE ADJUST	-3~**0**~+3	
M REG FINE ADJUST	-3~**0**~+3	
Y REG FINE ADJUST	-3~**0**~+3	

SYSTEM CONFIGURATION MENU

This menu adjusts general printer settings to suit the way you prefer to work.

SYSTEM CONFIGURATION MENU		
ITEMS	**SETTINGS**	**EXPLANATION**
STATUS PAGE AUTO PRINT	ENABLED DISABLED	Automatically prints status on power up.
TIME TO POWER SAVE MODE	5 MIN 15 MIN 30 MIN **60 MIN** 240 MIN	Adjusts the idling time before the printer automatically switches into power saving mode. In this mode power consumption is reduced to a low level required to just keep the printer operating and ready to receive data. When a job is sent the printer will require a warm-up time of up to 1 minute before printing can begin.
CLEAR ALARMS	**ON** JOB	When ON, non-critical warnings, such as requests for a different paper size, can be cleared by pressing the **ON LINE** button. When set to JOB, they are cleared when the print job resumes.
MANUAL FEED (Multi Purpose Tray) TIMEOUT	OFF 30~**90**~300 **SEC**	Specifies how many seconds the printer will wait for paper to be fed in manual feed mode before cancelling the job.
PRINT TIMEOUT	OFF 5~**90**~300	Specifies how many seconds the printer will wait when received data pauses before forcing a page eject. In PostScript Emulation mode the job will be cancelled if timeout occurs.
PRINT CONTINUATION AT TONER SHORTAGE (LOW TONER)	**CONTINUE** CANCEL	Specifies whether the printer should continue printing even after a low toner condition is detected.
JAM RECOVERY	**ON** OFF	Specifies whether the printer should perform jam recovery after a paper jam has occurred. If ON, the printer will attempt to print again any pages lost due to a paper jam once the jam has been cleared.
ERROR REPORT	ON **OFF**	Specifies whether to print an error report when an internal error occurs.
LANGUAGE	**English**, German, French, Italian, Spanish, Swedish, Norwegian, Finnish, Danish, Dutch, Turkish, Portuguese, Polish, Russian, Greek	Sets the language used for the Status Monitor and printed reports.

USB MENU

This menu controls the operation of the printer's USB data interface.

USB MENU		
ITEM	**SETTINGS**	**EXPLANATION**
SOFTWARE RESET	ENABLED / **DISABLED**	Enables or disables the SOFT RESET command. (Only available on Windows 98 and Windows Me.)
MAXIMUM SPEED	12MBPS **480MBPS**	Specifies the maximum transfer speed.
SERIAL NUMBER	**ENABLED** / DISABLED	Specifies the USB serial number to differentiate between USB devices connected to the PC. If ENABLED, the serial number is transmitted. If DISABLED, the serial number is not transmitted.

SYSTEM ADJUSTMENT MENU

This menu provides access to USB settings for your printer.

SYS ADJUST MENU		
ITEM	**SETTINGS**	**EXPLANATION**
X ADJUST	-2.00 ~ **0** ~ +2.00	Horizontal position.
Y ADJUST	-2.00 ~ **0** ~ +2.00	Vertical position.
DUPLEX X ADJUST	-2.00 ~ **0** ~ +2.00	Horizontal position.
DUPLEX Y ADJUST	-2.00 ~ **0** ~ +2.00	Vertical position.
DRUM CLEANING	ON **OFF**	ON rotates the drum (without printing) prior to printing to reduce any horizontal white line effect on the print.
POWER SAVE	ON **OFF**	Enables or disables automatic power save mode. Delay before entering this mode is set in the system configuration menu.

MAINTENANCE MENU

This menu provides access to various printer maintenance functions.

MAINTENANCE MENU		
ITEM	**SETTINGS**	**EXPLANATION**
MENU RESET	EXECUTE	Resets menus to default settings.
POWER SAVE MODE	ON/**OFF**	Enables or disables automatic power save mode. Delay before entering this mode is set in the system configuration menu.
PAPER BLACK SET	–2~**0**~+2	Used for small adjustment when you experience faded print or light specks / streaking in monochrome printing on white paper. Select a higher value to reduce fading, or a lower value to reduce specks or streaking in high density print areas.
PLAIN PAPER COLOUR SET	–2~**0**~+2	As above, but for colour printing.

USAGE MENU

This menu is for information only, and provides an indication of total usage of the printer and the expected life left in its consumable items. This is particularly useful if you do not have a full set of replacement consumables to hand and you need to know how soon you will need them.

USAGE MENU	
ITEM	**EXPLANATION**
SHEETS	
- TOTAL	The total number of prints output by the printer.
- TRAY	The total number of pages fed from Tray.
- MANUAL TRAY (MPT)	The total number of pages fed from the Multi Purpose Tray.
- COLOUR PAGE	The total number of pages printed in colour.
- MONO	The total number of pages printed in monochrome.
CONSUMABLE LIFE	Percentage of life remaining in these consumable items.
- BLACK (K) DRUM - C DRUM - M DRUM - Y DRUM - BELT - FUSER	

USAGE MENU	
ITEM	**EXPLANATION**
TONER LIFE - BLACK (K) - CYAN (C) - MAGENTA (M) - YELLOW (Y)	Current toner level.

PRINTING SETTINGS

To print a list of the printer settings:

1. Start the **Status Monitor.**
2. Select the **Printer Setup** tab.
3. Click on the **Printer Settings** button on the Printer Setup tab.
4. Click on the Information menu and then select Print Menu Map.
5. Click on the **Printer Menu** button to print a Menu Map of printer settings.

NOTE
*A menu map of printer settings can also be printed from the Status Panel by holding down the **ON LINE** button for 2 seconds.*

CHANGING THE DISPLAY LANGUAGE

If required, carry out the following instructions to change the language that is displayed in the Status Monitor.

1. Start the **Status Monitor**.
2. Select the **Printer Setup tab**.
3. Click on the **Printer Settings** button on the Printer Setup tab.
4. In the System Configuration menu, select the required language.
5. Click on the **Save** button.

REPLACING CONSUMABLE ITEMS

This section explains how to replace consumable items when due. As a guide, the life expectancy of these items is:

> **Toner**

Starter Cartridge:

The machine is shipped with sufficient Black, Cyan, Magenta & Yellow toner for 1,500 A4 pages, of which 500 A4 pages of toner are used to initially charge the image drum (1,000 A4 pages remaining at 5% coverage).

Replacement Cartridge:

Replacement cartridges are available in Standard capacity (1,500 A4 pages @ 5% coverage) and High capacity (2,500 A4 pages @5% coverage).

NOTE:
Toner life is directly affected by coverage, e.g. at 10% coverage there is sufficient toner for 750 A4 pages (standard capacity) or 1,250 A4 pages (high capacity).

> **Image drum** — 15,000 pages (calculated on typical office usage of 3 A4 pages per job).

> **Transfer belt** — Approximately 50,000 A4 pages at 3 pages per job.

> **Fuser** — Approximately 50,000 A4 pages.

CONSUMABLE ORDER DETAILS

ITEM	LIFE	ORDER NO.
Toner, Standard Capacity, black	1,500 A4 @ 5%	43459436
Toner, Standard Capacity, cyan	1,500 A4 @ 5%	43459435
Toner, Standard Capacity, magenta	1,500 A4 @ 5%	43459434
Toner, Standard Capacity, yellow	1,500 A4 @ 5%	43459433
Toner, High Capacity, black	2,500 A4 @ 5%	43459332
Toner, High Capacity, cyan	2,500 A4 @ 5%	43459331
Toner, High Capacity, magenta	2,500 A4 @ 5%	43459330
Toner, High Capacity, yellow	2,500 A4 @ 5%	43459329
Image drum kit, black,	15,000 A4 pages*	43460208
Image drum kit, cyan	15,000 A4 pages*	43460207
Image drum kit, magenta	15,000 A4 pages*	43460206
Image drum kit, yellow	15,000 A4 pages*	43460205
Fuser	50,000 A4 paper	43377003
Transport belt	50,000 A4 @ 3/job	43378002

* Average life: 20% pages at continuous print, 50% pages at 3 pages per job and 30% pages at 1 page per job.

Only use genuine Oki Original consumables to ensure the best quality and performance from your hardware. Non Oki Original products may adversely effect your printer's performance and invalidate your warranty. Specifications subject to change without notice. All trademarks acknowledged.

TONER CARTRIDGE REPLACEMENT

CAUTION!

To avoid toner wastage and possible toner sensor errors, do not change the- toner cartridge(s) until "TONER EMPTY" is displayed through the Status Monitor.

The toner used in this printer is a very fine dry powder. It is contained in four cartridges: one each for cyan, magenta, yellow and black.

Have a sheet of paper handy so that you have somewhere to place the used cartridge while you install the new one.

Dispose of the old cartridge responsibly by placing it inside the pack that the new one came in. Follow any regulations, recommendations, etc., which may be in force concerning waste recycling.

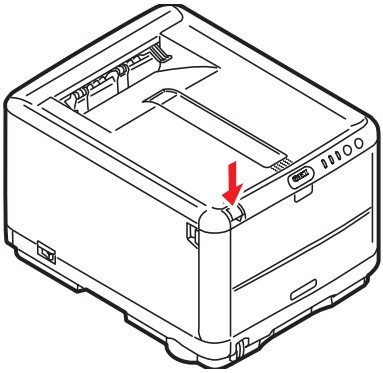
If you do spill any toner powder, lightly brush it off. If this is not enough, use a cool, damp cloth to remove any residue. *Do not use hot water, and never use solvents of any kind. They will make stains permanent.*

WARNING!

If you inhale any toner or get it in your eyes, drink a little water or bathe your eyes liberally in cold water. Seek medical attention immediately.

Before changing the toner cartridge, switch off the printer and allow the fuser to cool for about 10 minutes before opening the cover.

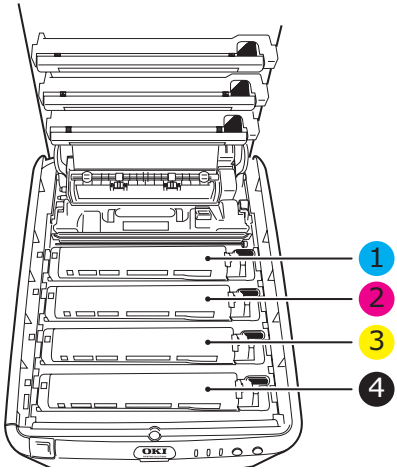
1. Press the cover release and open the printer's top cover fully.



WARNING!

If the printer has been powered on, the fuser may be hot. This area is clearly labelled. Do not touch this area.

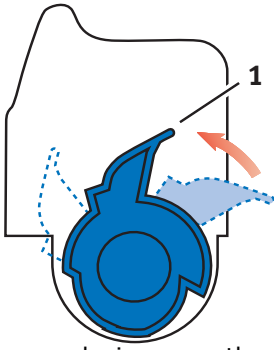
2. Note the positions of the 4 cartridges.



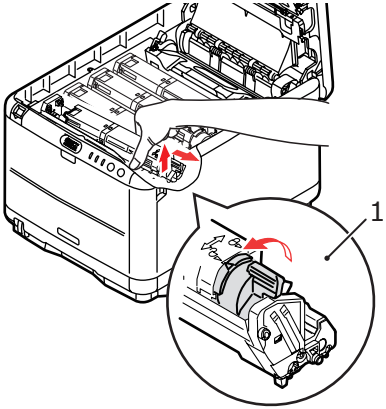
1. Cyan cartridge	2. Magenta cartridge
3. Yellow cartridge	4. Black cartridge

3. Carry out one of the following:

(a) If you are replacing a toner cartridge that has been supplied with your printer (release lever has 3 positions), pull the coloured toner release lever on the cartridge to be replaced towards the front of the printer, in the direction of the arrow, but stop at the central (upright) position (1).



(b) If you are replacing any other toner cartridge (lever has 2 positions), pull the coloured toner release lever (1) on the cartridge to be replaced fully towards the front of the printer.



4. Lift the right-hand end of the cartridge and then draw the cartridge to the right to release the left-hand end as shown, and withdraw the toner cartridge from the printer.

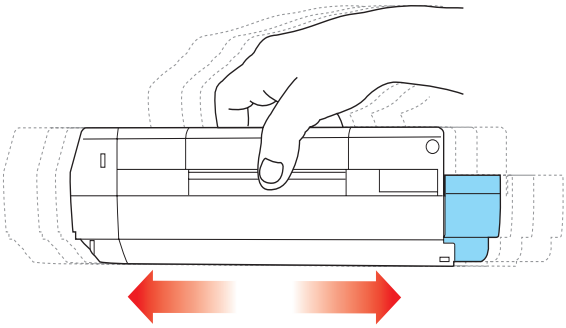
5. Put the cartridge down gently onto a piece of paper to prevent toner from marking your furniture.

CAUTION!

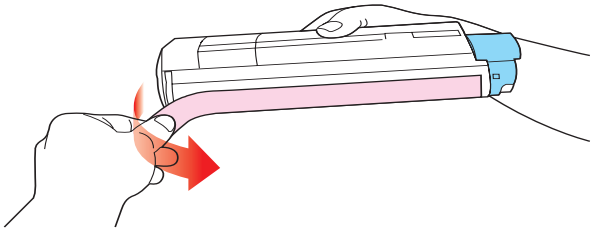
The green image drum surface is very delicate and light sensitive. Do not touch it and do not expose it to normal room light for more than 5 minutes. If the drum unit needs to be out of the printer for longer than this, please wrap the cartridge inside a black plastic bag to keep it away from light. Never expose the drum to direct sunlight or very bright room lighting.

6. Remove the new cartridge from its box but leave its wrapping material in place for the moment.

7. Gently shake the new cartridge from end to end several times to loosen and distribute the toner evenly inside the cartridge.

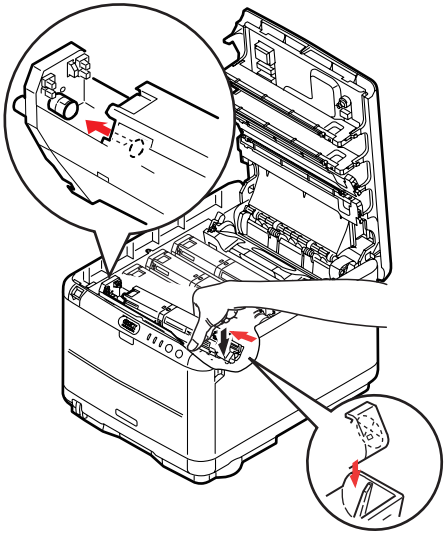


8. Remove the wrapping material and peel off the adhesive tape from the underside of the cartridge.

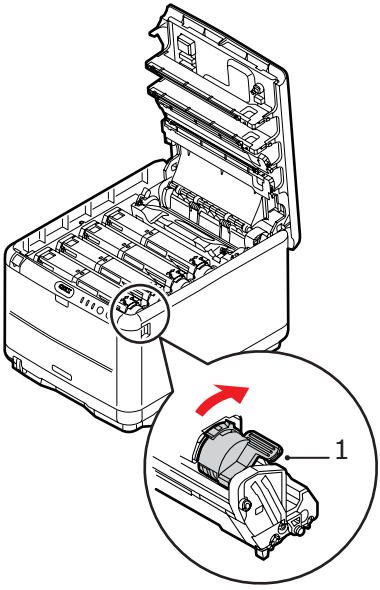


9. Holding the cartridge by its top centre with the coloured lever to the right, lower it into the printer over the image drum unit from which the old cartridge was removed.

10. Insert the left end of the cartridge into the top of the image drum unit first, pushing it against the spring on the drum unit, then lower the right end of the cartridge onto the image drum unit.



11. Pressing gently down on the cartridge to ensure that it is firmly seated, push the coloured lever (1) towards the rear of the printer. This will lock the cartridge into place and release toner into the image drum unit.



12. Finally, close the top cover and press down firmly so that the cover latches closed.

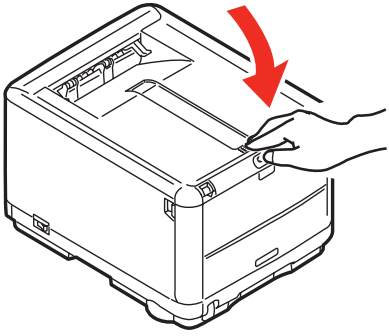


IMAGE DRUM REPLACEMENT

WARNING!

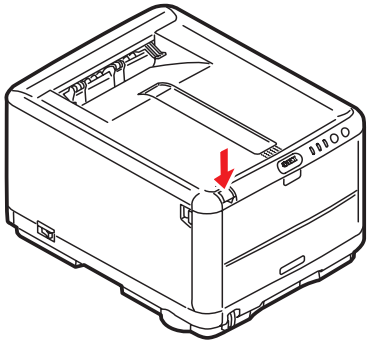
If the printer has been powered on, the fuser will be hot. This area is clearly labelled. Do not touch.

CAUTION!

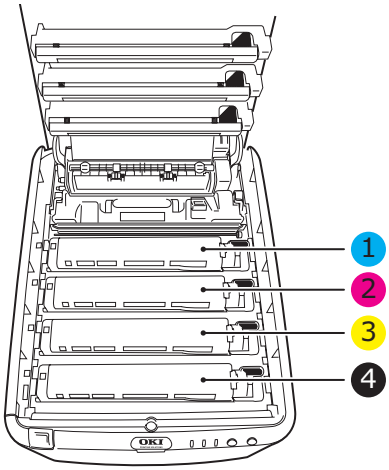
Static sensitive devices, handle with care.

The printer contains four image drums: cyan, magenta, yellow and black.

1. Press the cover release and open the printer's top cover fully.

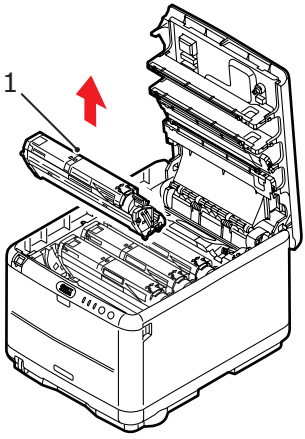


2. Note the positions of the 4 cartridges.



1. Cyan cartridge	2. Magenta cartridge
3. Yellow cartridge	4. Black cartridge

3. Holding it by its top centre, lift the image drum, complete with its toner cartridge (1), up and out of the printer.



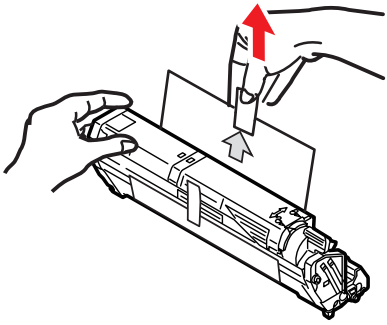
4. Put the old unit down gently onto a piece of paper to prevent toner from marking your furniture.

5. Take the new image drum unit, complete with toner cartridge (assembled according to the installation guide) and place it on the piece of paper where the old ID unit was placed.

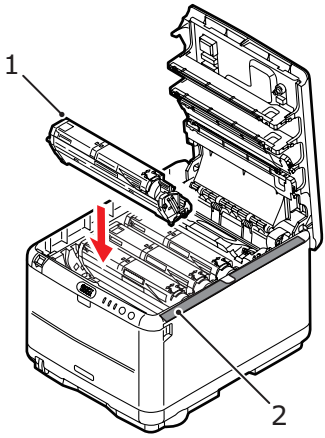
CAUTION!

The green image drum surface at the base of the cartridge is very delicate and light sensitive. Do not touch it and do not expose it to normal room light for more than 5 minutes. If the drum unit needs to be out of the printer for longer than this, please wrap the cartridge inside a black plastic bag to keep it away from light. Never expose the drum to direct sunlight or very bright room lighting.

6. Remove the protective sheets from the image drum unit. Keep it the same way round as the old unit. Pack the old ID unit inside the packaging material for disposal.



7. Holding the complete assembly by its top centre, lower it into place in the printer, locating the pegs at each end (1) into their slots (2) in the sides of the printer cavity.



8. Finally, close the top cover and press down firmly at both sides so that the cover latches closed.

NOTE
If you need to return or transport your printer for any reason, please make sure you remove the image drum unit beforehand and place in the bag provided. This is to avoid toner spillage.

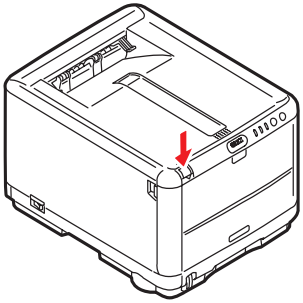
REPLACING THE BELT UNIT

The belt unit is located under the four image drums. This unit requires replacement approximately every 50,000 pages.

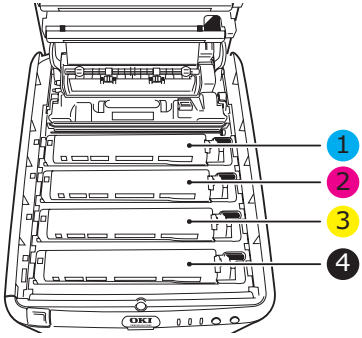
WARNING!

If the printer has been powered on, the fuser will be hot. This area is clearly labelled. Do not touch.

1. Press the cover release and open the printer's top cover fully.

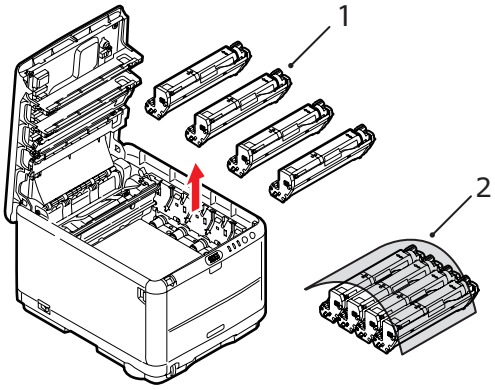


2. Note the positions of the 4 cartridges. It is essential that they go back in the same order



1. Cyan cartridge	2. Magenta cartridge
3. Yellow cartridge	4. Black cartridge

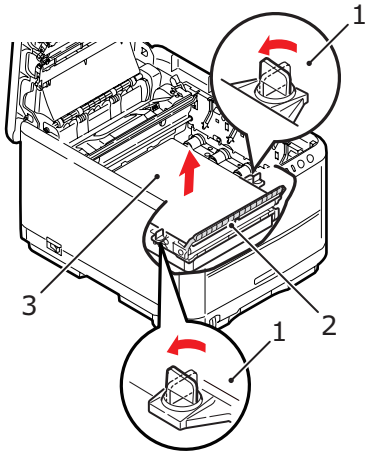
3. Lift each of the image drum units (1), starting from the rear, out of the printer and place them in a safe place away from direct sources of heat and light (2).



CAUTION!

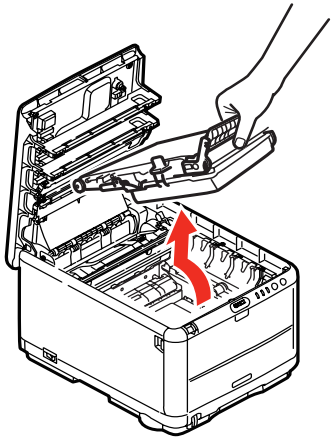
The green image drum surface at the base of each cartridge is very delicate and light sensitive. Do not touch it and do not expose it to normal room light for more than 5 minutes. If the drum unit needs to be out of the printer for longer than this, please wrap the cartridge inside a black plastic bag to keep it away from light. Never expose the drum to direct sunlight or very bright room lighting.

4. Locate the two fasteners (1) at each side of the belt (3) and the lifting bar (2) at the front end.

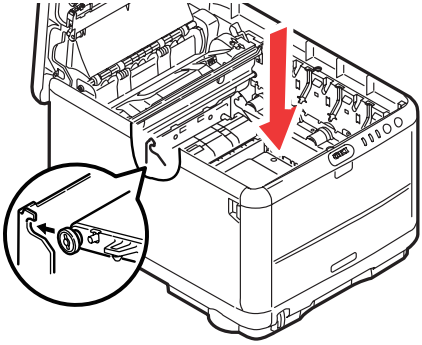


5. Turn the two fasteners (1) 90° to the left. This will release the belt from the printer chassis.

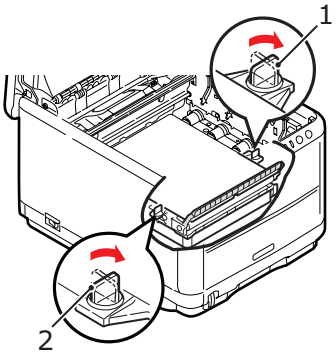
6. Pull the lifting bar (2) upwards so that belt tilts up towards the front, and withdraw the belt unit from the printer.



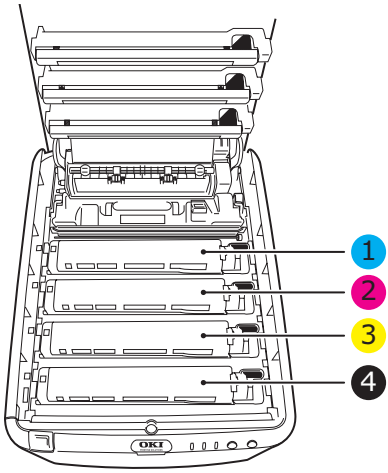
7. Lower the new belt unit into place, with the lifting bar at the front and the drive gear towards the rear of the printer. Locate the drive gear into the gear inside the printer by the rear left corner of the unit, and lower the belt unit flat inside the printer.



8. Turn the two fasteners (1) 90° to the right until they lock. This will secure the belt unit in place.



9. Replace the 4 image drums, complete with their toner cartridges, into the printer in the correct positions as shown.



1. Cyan cartridge	2. Magenta cartridge
3. Yellow cartridge	4. Black cartridge

10. Finally, close the top cover and press down firmly at both sides so that the cover latches closed.

FUSER REPLACEMENT

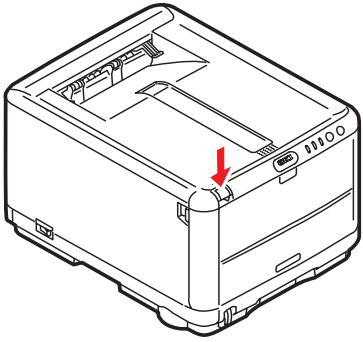
The fuser is located inside the printer just behind the four image drum units.

WARNING!

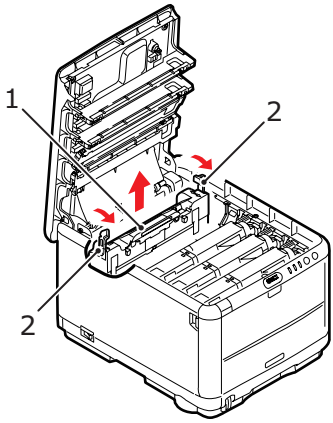
If the printer has recently been powered on, some fuser components will be very hot. Handle the fuser with extreme care, holding it only by its handle, which will only be mildly warm to the touch. A warning label clearly indicates the area. If in doubt, switch the printer off and wait at least 10 minutes for the fuser to cool before opening the printer cover.

Switch off the printer and allow the fuser to cool for about 10 minutes before opening the cover.

1. Press the cover release and open the printer's top cover fully.



2. Identify the fuser handle (1) on the top of the fuser unit.

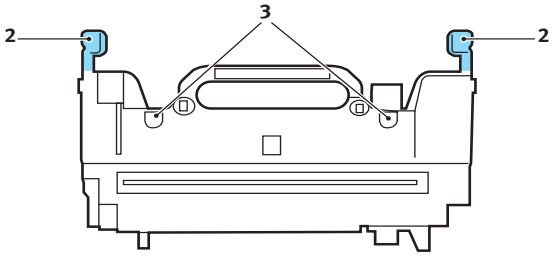


3. Pull the two fuser retaining levers (2) towards the front of the printer so that they are fully upright.

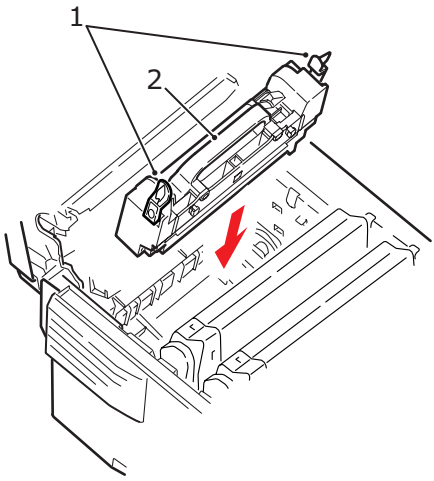
4. Holding the fuser by its handle (1), lift the fuser straight up and out of the printer. If the fuser is still warm, place it on a flat surface which will not be damaged by heat.

5. Remove the new fuser from its packaging and remove the transit material.

6. Holding the new fuser by its handle, make sure that it is the correct way round. The retaining levers (2) should be fully upright, and the locating lugs (3) should be towards you. There is one locating lug at each end of the fuser.



7. Holding the fuser handle (2), lower the fuser into the printer, locating the two lugs into their slots in the metal partition which separates the fuser area from the image drums.



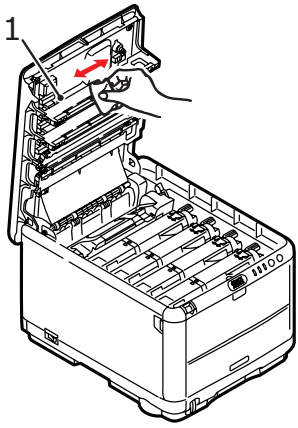
8. Push the two retaining levers (1) towards the rear of the printer to lock the fuser in place.

9. Finally, close the top cover and press down firmly at both sides so that the cover latches closed.

CLEANING THE LED HEAD

Clean the LED head when printing does not come out clearly, has white lines or when text is blurred.

1. Switch off the printer and open the top cover.
2. Gently wipe the LED head surface (1) with LED lens cleaner or soft tissue.



CAUTION!

Do not use methyl alcohol or other solvents on the LED head as damage to the lens surface will occur.

3. Close the top cover.

INSTALLING ADDITIONAL MEMORY

This section explains how to install additional RAM memory into your printer as a memory upgrade.

ORDER CODES

Use the following order codes for additional memory:

> 64MB RAM – 01110301

> 256MB RAM – 01110302

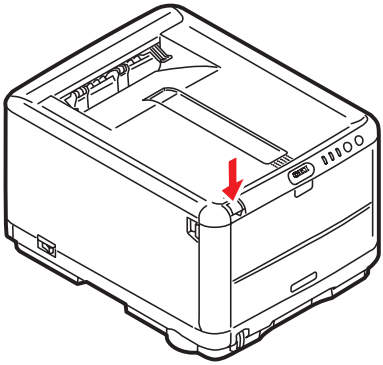
MEMORY UPGRADE

The basic printer model comes equipped with 32MB of main memory. This can be upgraded with an additional memory board containing 64MB or 256MB, giving a maximum total memory capacity of 288MB.

Installation takes a few minutes, and requires a medium size cross-head (Philips type) screwdriver.

1. Switch the printer off and disconnect the AC power cable.

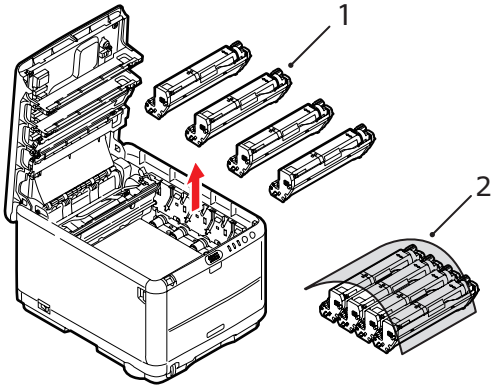
2. Press the cover release and open the printer's top cover fully.



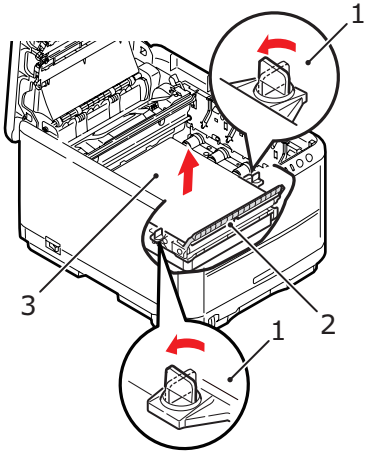
WARNING!

If the printer has been powered on recently, the fuser will be hot. This area is clearly labelled. Do not touch.

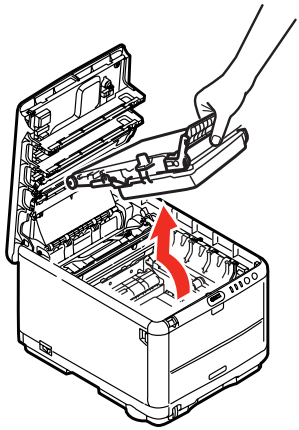
3. Remove each image drum units, starting with the front. Cover the image drum units to protect them from direct light



4. Locate the two fasteners (1) at each side of the belt (3) and the lifting bar (2) at the front end.

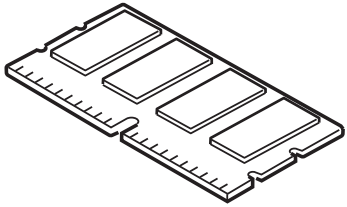


5. Unlock the fasteners and remove the belt as shown.

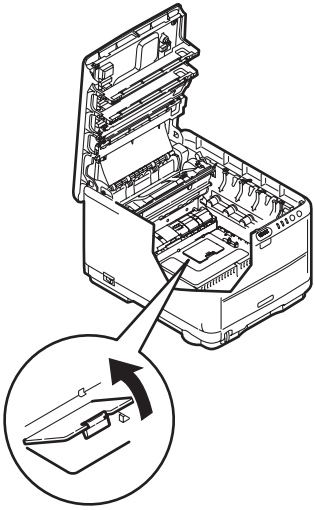


6. Carefully remove the new memory board from its wrapping. Try to handle the board only by its short edges, avoiding contact with any metal parts as far as possible. In particular, avoid touching the edge connector.

7. Notice that the memory board has a small cutout in the edge connector, which is closer to one end than the other.



8. Identify the RAM expansion slot in the printer. Unclip the plastic cover to open this slot.



9. If the RAM expansion slot already contains a memory upgrade board, that board will have to be removed before you can install the new one. To remove it proceed as follows, otherwise skip to step 10.

(a) Identify the locking clips at each end of the RAM expansion slot.

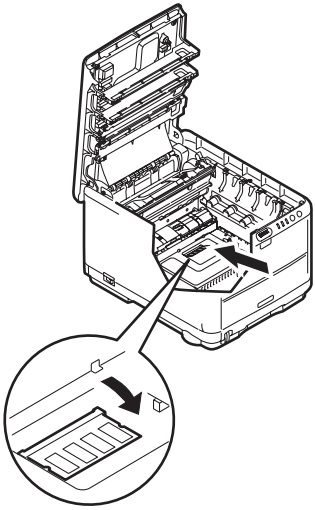
(b) Push the clips outward and back into the printer. The board will pop out slightly.

(c) Grip the board firmly by its short edges and pull it out of the slot.

(d) Place the removed memory board in the antistatic bag which originally contained the new memory board.

10. Hold the new memory board by its short edges, so that the edge connector faces in towards the RAM expansion slot, and the small cutout is closer to the bottom of the printer.

11. Gently push the board into the RAM expansion slot until it latches in and will not go any further.



12. Close the RAM expansion slot.

13. Replace the belt and image drum units as described in "Replacing consumable items" on page 81.

14. Close the top cover of the printer.

15. Reconnect the AC power cable and switch the printer on.

16. When the printer is ready, print a menu map by holding down the **ON LINE** button on the Operation Panel for 2 seconds.

17. Examine the first page of the menu map.

Near the top of the page, between the two horizontal lines, you will see the current printer configuration. This list contains the figure for total memory size.

This should indicate the total memory now installed, which should be the size of memory board you have installed plus 32MB.

TROUBLESHOOTING

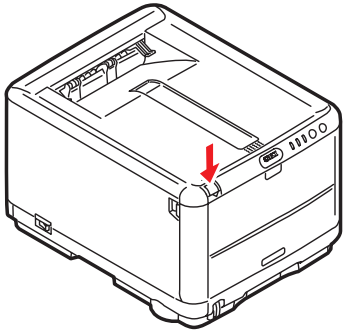
CLEARING PAPER JAMS

Provided that you follow the recommendations in this guide on use of print media, and you keep the media in good condition prior to use, your printer should give years of reliable service. However, paper jams occasionally do occur, and this section explains how to clear them quickly and simply.

Jams can occur due to paper misfeeding from a paper tray or at any point on the paper path through the printer. When a jam occurs, the printer immediately stops, and the Alert LED on the Status Panel (together with the Status Monitor) informs you of the event. If printing multiple pages (or copies), do not assume that, having cleared an obvious sheet, others will not also be stopped somewhere along the path. These must also be removed in order to clear the jam fully and restore normal operation.

1. If a sheet is well advanced out of the top of the printer, simply grip it and pull gently to draw it fully out. If it does not remove easily, do not use excessive force. It can be removed from the rear later.

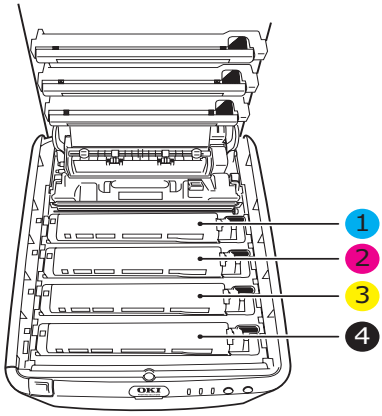
2. Press the cover release and open the printer's top cover fully.



WARNING!

If the printer has been powered on, the fuser will be hot. This area is clearly labelled. Do not touch.

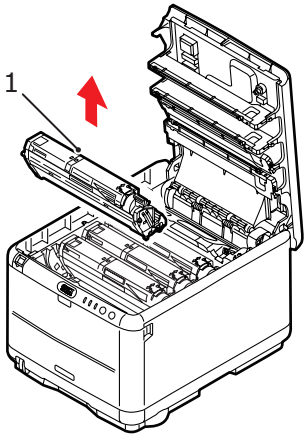
3. Note the positions of the 4 cartridges.



1. Cyan cartridge	2. Magenta cartridge
3. Yellow cartridge	4. Black cartridge

It will be necessary to remove the four image drums to gain access to the paper path.

4. Holding it by its top centre, lift the cyan image drum, complete with its toner cartridge (1), up and out of the printer.

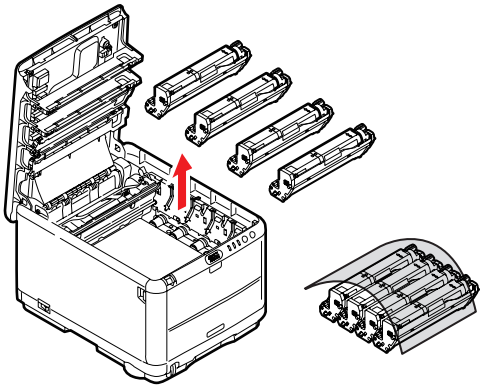


5. Put the cartridge down gently onto a piece of paper to prevent toner from marking your furniture and to avoid damaging the green drum surface.

CAUTION!

The green image drum surface at the base of the cartridge is very delicate and light sensitive. Do not touch it and do not expose it to normal room light for more than 5 minutes.

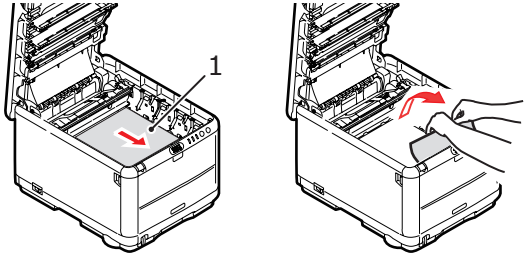
6. Repeat this removal procedure for each of the remaining image drum units. Cover the image drum units to protect them from direct light.



7. Look into the printer to check whether any sheets of paper are visible on any part of the belt unit.

8. Remove any sheets of paper as follows:

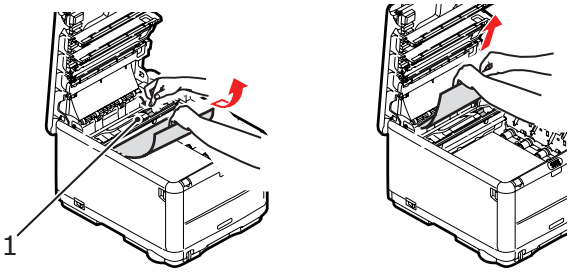
   > To remove a sheet with its leading edge at the front of the belt (1), carefully lift the sheet from the belt and pull it forwards into the internal drum cavity and withdraw the sheet.



CAUTION!

Do not use any sharp or abrasive objects to separate sheets from the belt. This may damage the belt surface.

> To remove a sheet from the central area of the belt, carefully separate the sheet from the belt surface and withdraw the sheet.



> To remove a sheet just entering the fuser , separate the trailing edge of the sheet from the belt, push the fuser pressure release lever (1) towards the front and down to release the fuser's grip on the sheet, and withdraw the sheet through the drum cavity area. Then allow the pressure release lever to rise again.

NOTE
If the sheet is well advanced into the fuser (only a short length is still visible), do not attempt to pull it back. Follow the next step to remove it from the rear of the printer.

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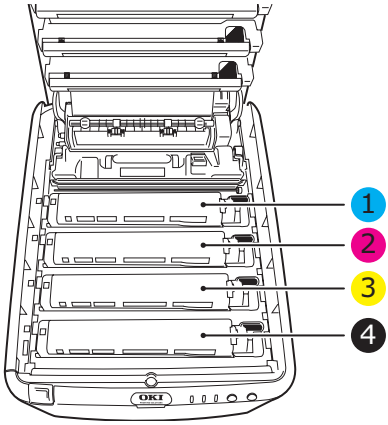
9. Starting with the cyan image drum unit nearest the fuser, replace the four image drums into the drum cavity, making sure to locate them in the correct order.

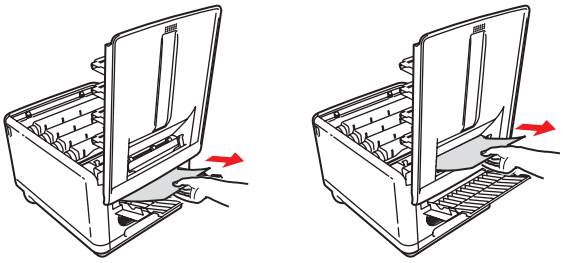


1. Cyan cartridge	2. Magenta cartridge
3. Yellow cartridge	4. Black cartridge

> Holding the complete assembly by its top centre, lower it into place in the printer, locating the pegs at each end into their slots in the sides of the printer cavity.

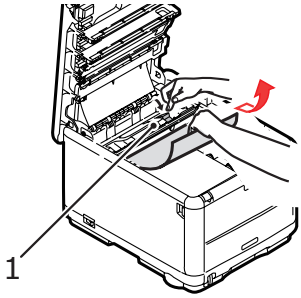
10. Lower the top cover but do not press down to latch it closed yet. This will protect the drums from excessive exposure to room lighting while you check the remaining areas for jammed sheets.

11. Open the rear stacker and check for a sheet of paper in the rear path area.



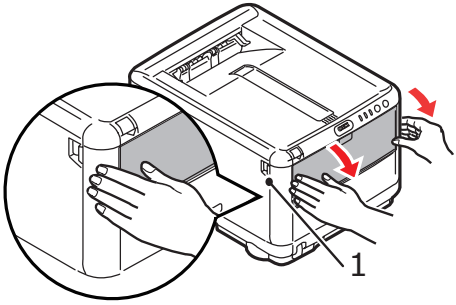
> Pull out any sheets found in this area.

> If the sheet is low down in this area and difficult to remove, it is probably still gripped by the fuser. In this case raise the top cover, reach around and press down on the fuser pressure release lever (1).

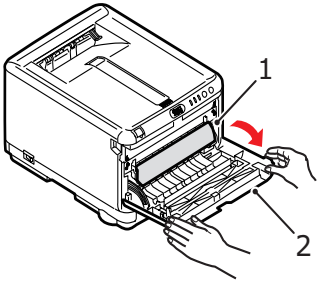


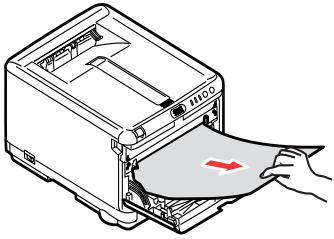
12. If you are not using the rear stacker, close it once paper has been removed from this area.

13. Press the front cover release and pull open the front cover.

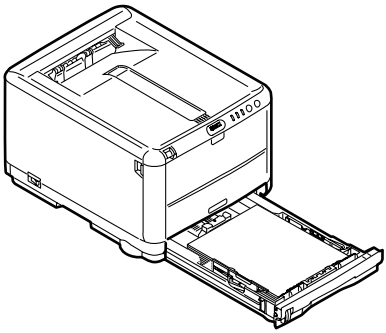


14. Check inside the cover for sheets in this area and remove any that you find, then close the cover.

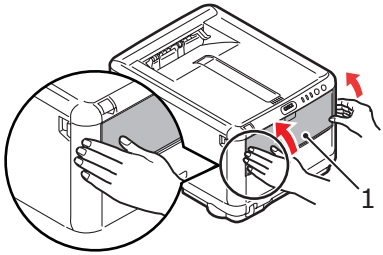




15. Pull out the Cassette Tray and ensure that all paper is stacked properly, is undamaged, and that the paper guides are properly positioned against the edges of the paper stack. When satisfied, replace the tray.



16. Finally, close the top cover and press down firmly at both sides so that the cover latches closed.



When the jam has been cleared, if Jam Recovery is set to ON in the System Configuration Menu, the printer will attempt to reprint any pages lost due to paper jams.

SPECIFICATIONS

C3450 N (N34112B)

ITEM	SPECIFICATION
Dimensions	376 x 479 x 290mm (W x D x H)
Weight	21Kg approximately
Print speeds	16 pages per minute colour 20 pages per minute monochrome
Resolution	600 x 600dpi 1200 x 600dpi 600 x 600dpi x 2bit
Emulations	Windows GDI, Direct Raster
Auto Features	Auto registration Auto density adjustment Auto consumable counter reset Auto IP address set
Memory	32MB standard, (upgradable to 96MB or 288MB)
Operating platform	Windows 2000/XP/XP Pro x64 bit Edition*/NT4.0 /Server 2003/Server 2003 x64 bit Edition*, Vista 32 & 64 bit. * x86-64 processors only. Itanium is not supported. Mac OS X (10.2 or higher), Classic
Paper capacity at 80g/m²	250 sheets in the Cassette Tray 100 sheets in Multi Purpose Tray
Paper size - any tray	A4, A5, A6 (tray 1 only), B5, Legal 13/13.5/14 inch, letter, Executive.
Paper size - MP tray	A4, A5, A6, B5, Legal 13/13.5/14 inch, letter, executive, custom (up to 1200mm length), com-9 envelope, com-10 envelope, monarch envelope, DL envelope, C5 envelope
Interfaces	
Universal Serial Bus (USB)	USB specification Version 2.0 Connection: USB type B Cable: USB specification version2.0 (shielded) Transmission mode: High speed (480Mbps + 0.25% maximum)
Network	10 Base T, 100 Base TX
Paper weight	Standard Printing: 64 ~ 120g/m² in the Cassette Tray 75 ~ 203g/m² in Multi Purpose Tray 2 Sided (Manual Duplex) Printing: 64 ~ 120g/m² in the Cassette Tray 75 ~ 105g/m² using Multi Purpose Tray
Paper output	150 sheets in face down (top) stacker @ 80g/m² 1 sheet in face up (rear) stacker @ 80g/m²
Printer life	300,000 pages or 5 years
Duty cycle	35,000 pages per month maximum or 5,000 average
Toner life	1,000 pages at 5% coverage

ITEM	SPECIFICATION		
Image drum life	15,000 pages (typical office usage based on 3 A4 pages per job)		
Belt life	50,000 A4 pages at 3 pages per job		
Fuser life	50,000 A4 pages		
Power supply	220 to 240VAC @ 50/60 Hz ± 1 Hz		
Power consumption	Operating: Stand-by: Power saving: Power saving:	980 max.; 400 W av. (25°C) 100 max.; (25°C) 45 W max. (20ppm colour) 70 W max. (26ppm colour)	
Environmental	Operating: Off: Storage:	10 to 32 °C @ 20% to 80% RH 0 to 43 °C/10 @ 90% RH -10 to +43°C @ 10 to 90% RH	
Noise		Colour	Mono
(Sound pressure level)	Operating: Standby: Power saving:	50.0dB(A) 37.0dB(A) Background level	51.0dB(A) 37.0dB(A)

Specifications subject to change without notice. All trademarks acknowledged.

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